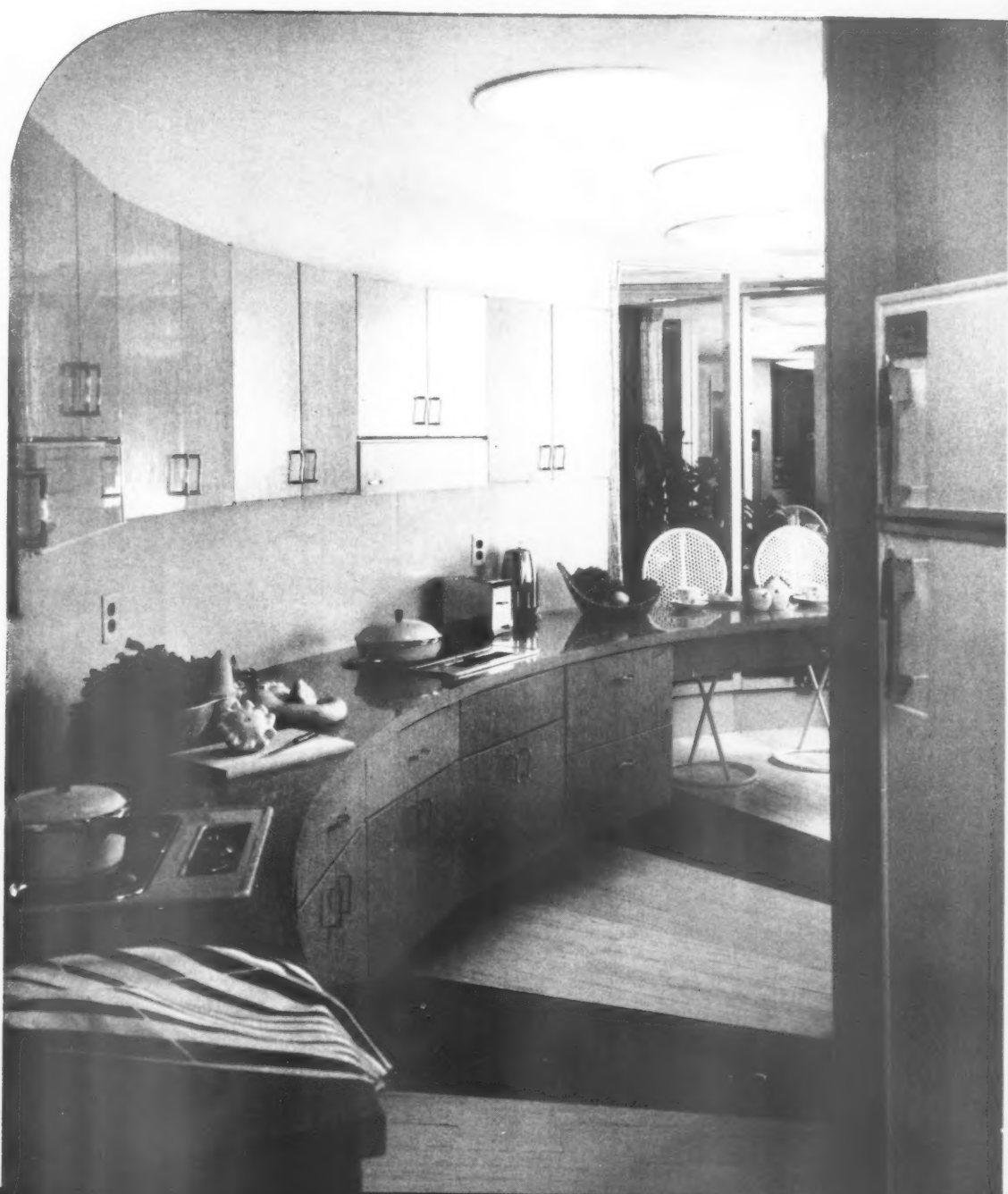


AMERICAN GAS ASSOCIATION

MARCH
1960





Now Air-Condition Your Home With Low-Cost Gas!

And—come winter—the same compact SUN VALLEY* All-Year® Unit becomes your heating system.

Now you can beat the heat—economically—with Gas. An Arkla-Servel Sun Valley All-Year Gas Air Conditioner *cools every room in the house*, yet keeps the monthly bills low—lower, in fact, than many of your friends may be paying to cool only one or two rooms.

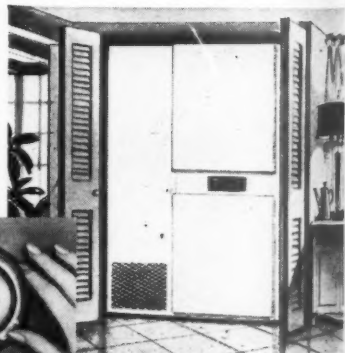
And then, when winter comes, your Arkla-Servel provides the most dependable—and economical—heating system you can have. Your family will enjoy comfort they've never known before, with indoor weather that's spring-like all year long. Clean, filtered air circulates constantly through all the rooms at exactly the temperature

you select. In summer the air is dehumidified.


Carefree Operation

Your Sun Valley is a cinch to operate—just one easy-to-set thermostat. A single, compact unit cools in summer, heats in winter. And because it works with Gas, there's no need for fuel storage, no worry about fuel deliveries. Your Sun Valley provides low annual maintenance and long life, too, because there are no moving parts in the cooling cycle. In fact, you can compare the life of the unit to the life of your home.

See your Arkla-Servel dealer now. There's a Sun Valley available in models and sizes to fit any home. *Five year warranty.*



AMERICAN GAS ASSOCIATION

ONLY GAS  **does so much more...for so much less!**

*Trademark. Product of Arkla Air Conditioning Corp. General Sales Offices, Little Rock, Arkansas



A new idea in New Freedom kitchens is presented in this arc shaped design by LIVING magazine. (See story on page 16)

THE picture above, this month's cover photo, and the related story on page 16, inaugurate a new series in the A. G. A. MONTHLY. The sight of so many beautiful New Freedom gas kitchens in the leading national women's magazines led to the thought, "if it's good enough for Good Housekeeping, it's good enough for the MONTHLY." Therefore, it will be our policy from time to time to publish stories and photographs on outstanding New Freedom magazine kitchens. . . . Air conditioning is the subject of two major features in this issue (pages 14 and 18), so it is fitting that our inside front cover, opposite, carry out the theme. Though it's still winter in New York, if not in Dallas, Texas, it's time to think about air conditioning, from a sales viewpoint at least. The ad opposite, covering both seasons, was seen widely last fall and winter. It appeared in American Home, House Beautiful, House & Garden, House Beautiful's Building Manual, New Homes Guide, and House & Garden's Book of Building. . . . A feature of major importance to the industry, which should be read with one eye on the future, is the article on the thermocatalytic burner, the Pyrocore, written by its inventor (page 8). . . . An outstanding Portland promotion suddenly has gas homes filling the Oregon landscape (page 20).

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Home Service 'Sold on Selling'



Head table guests at Home Service Luncheon, from left: Margaret Spader, Burton Larson, Ione Lankelma, C. S. Stackpole, Mildred Endner, Wister H. Ligon, Ellen Bridges, James Condon and Evelyn Kafka. Not present were James Diesing and David McDermand

As leading lady among its star salesmen, the gas industry's Home Service woman stepped to stage center last month at the annual Home Service Workshop, held in Chicago February 4-6.

"S. O. S.—Sold On Selling" was the theme for a solid three days of lectures, demonstrations and luncheon talks, attended by nearly 200 Home Service representatives and gas company executives from Canada and most of the states of the U. S., including the nation's newest state, Hawaii.

The national workshop was conducted under the chairmanship of Mildred Endner, Minneapolis Gas Co., with Ellen Bridges, A. G. A.'s new Home Service Counselor, serving as secretary.

Areas covered in the practical and down-to-earth discussions of the first session included: one-girl departments; gas company kitchen tours; men's classes; formulas for success; and the importance of home service in the eyes of management.

The second session, on Thursday afternoon, covered laun-

dry home calls; demonstration attention-getters; a roundup of information on new gas appliances and equipment; and the Home Service woman as the best laundry salesman.

The morning of the meeting's second day was devoted to a complete tour of the gas appliance manufacturer's section in Chicago's mammoth Merchandise Mart. Here the delegates, working in groups of 10 to 15, were able to inspect the newest and best gas appliances and equipment displayed in separate exhibits by 19 major manufacturers.

On Friday afternoon, delegates convened at the Home Service Auditorium of The Peoples Gas Light and Coke Co., Chicago. There they witnessed a model cooking demonstration and heard talks on new developments in controls, and on conducting a Home Service television show.

Subjects of the final day included public relations aspects of Home Service, covered in both a talk and a film; Home Service-school teacher relations; a comparison of American vs. European cookery; an illustrated "travelogue" on Home Service in Honolulu; and Home Service as a sales tool.



Thursday morning speakers. Standing: Mildred Endner, workshop chairman; Burton Larson; Ellen Bridges. Seated: Dorothy O'Meara; Mrs. Ernestine Achenbach; and Marjorie Chandler



Thursday afternoon speakers. Seated, from left: Mrs. Laverne Halverson; Evelyn Kafka; Mrs. Vivian Beary, presiding. Standing: Margaret Spader, left, and Patricia A. Huff

Friday speakers. From left: Mildred R. Clark; Mrs. Lou Adams; E. Ione Lankelma; Madonna Bergman; Mrs. Shirley Pemberton; Pat Hendrick; and Mrs. Laura Piepgras, presiding



Saturday speakers. Seated, from left: Mrs. Dorothy Healy; Mrs. Aster Yamagata; Marie O'Brien. Standing, from left: James Diesing; Mrs. Myrtle Strahan; and Margaret Killian

In her talk opening the meeting, Mildred Endner explained the importance of the workshop theme, "S. O. S.—Sold On Selling."

"We have a great deal to sell," Miss Endner said, "and the program was planned to help us do that job better."

"Are we selling home economics in business to the high school girl and college student through our school program? Do we contact heads of colleges and department heads of home economics to assist them in selling home economics in business careers to their students by informing them of the opportunities afforded them by such careers? Are we doing our part?"

"Are we selling Home Service personnel before they are qualified to sell the homemaker? By this I mean are we training our staff members and listening to what they say on demonstrations, on the phones and on the home call? Do they realize when they begin working for us that their food training is only a means to an end—that selling a gas appliance is our prime objective—that the food is prepared to

show the audience how easily it can be done with modern gas appliances? Are we doing our part in properly training and supervising our staffs?"

"When a demonstration is presented, are we selling the appliance?"

"... On this same demonstration are we selling 'gas the product' by pointing out each time its truly wonderful advantages over other fuels?"

"Our program was planned to sell this job of selling."

The talks and demonstrations which followed fulfilled this objective thoroughly and effectively, succeeding both in arousing the delegates' enthusiasm and in providing a wealth of detail on how to go about the job of selling through Home Service.

In "How a One-Girl Department Meets the Challenge," Mrs. Ernestine Achenbach, Greeley Gas Co., Greeley, Colo., described the formidable problem faced by a one-woman staff, and the methods she found successful in coping with it.

Mrs. Achenbach outlined three objectives for any Home

● *Talks, demonstrations, tour of new gas appliance exhibits provide*



Cooking demonstration by Mrs. Sophie Petros and Winifred Callaghan featured "perfect marriage" of gas range and gas refrigerator



Service department:

1. Selling, or increasing the sale of gas appliances.
2. The improvement of public relations.
3. Increasing the use of the gas company's service.

To meet the challenge of selling gas appliances, Mrs. Achenbach said, her department undertook a few large projects. These included a spring cooking school combined with a spring fashion show; a cooking school tied in with a local supermarket which provided assistance by its own home economist and meat specialist; and a tie-in with a local florist for a flower arranging demonstration. As a result of the latter, Mrs. Achenbach said, she was asked to conduct a week's classes in Demonstration Techniques by the Home Economics department of Colorado State College.

The tie-in arrangement proved an effective means of overcoming the limitations of a one-person staff.

Public relations in Greeley were aided considerably by the gas company's Blue Flame Room, a large, well-equipped room which the company could invite local groups to make use of for banquets, luncheons, club meetings and other events. The kitchen of the Blue Flame Room served as the Home Service test kitchen, while the main room provided the Home Service auditorium. The extra uses of the room helped

to create local goodwill through the entertainment of more than 12,500 key local citizens during 1959.

It is essential to good public relations that a one-person department not be over-committed to service calls by the sales force, however, Mrs. Achenbach pointed out.

In the area of gas sales, Mrs. Achenbach reported that in her experience it was found possible to do much through demonstrations during open houses in new model all-gas homes.

Mrs. Mary Jo Biediger, City Public Service Board, San Antonio, Texas, described a "Kitchen Tour Sponsored by a Utility Company."

As a substitute for a kitchen planning layout or office in the gas company itself, the San Antonio company organized a tour of outstanding gas kitchens in private homes of the community. While the gas company took care of necessary expenses, organizing was left to the cooperating Woman's Society of a local church. Tickets were sold, with proceeds going to the church group. The tour resulted in more than 1,000 visits to gas kitchens the first year, and more than 1,900 visits the second year, plus considerable newspaper publicity.

Men's classes in cooking demonstrations was the unusual idea presented by Dorothy O'Meara, Bridgeport Gas Co., in "What's New in Men's Classes."

provide curriculum for a three-day 'course' in fundamental aims of Home Service work

Tour in Chicago's huge Merchandise Mart took Home Service delegates to gas appliance exhibits of 19 manufacturers



"Last spring," Miss O'Meara said, "when we were considering new projects, we decided that a pilot demonstration would show us whether or not we could interest men in cooking demonstrations. The response was so convincing that we immediately went to work on a series for the year."

The idea immediately attracted attention when it was publicized through announcements, notices and excellent newspaper publicity.

"Who attends these demonstrations? All types of men," Miss O'Meara said—"lawyers, dentists, directors of social agencies, at least one doctor, the assistant fire chief, business men and factory workers. A few are retired, most are young and active. All like to cook and desire to gain new ideas and recipes."

In the beginning, Miss O'Meara said, it was decided that men cooks would be invited to be the demonstrators.

The male demonstrators turned out to be excellent lecturers, especially on the subject of automatic controls and other modern gas range features. Chiefly, the search for guest demonstrators centered on amateur chefs, the same type as those making up the audiences. Several experts in various specialties were obtained.

In "Stairway to Success," Marjorie Chandler, Consumers'

Gas Co., Toronto, Ontario, Canada, told how her company's Home Service auditorium was put to good public relations use when it was offered as the classroom for a Women's Advertising Club self-improvement course. Through the course, the gas company reaped much favorable publicity, was able to contact many potential customers through placing gas company speakers on the course program, provided a worthwhile opportunity for the gas company's own women employees, and opened the door to other group activities.

Burton Larson, general sales manager, Southern Counties Gas Co. of California, Los Angeles, in "Home Service Through the Eyes of Management," stressed the importance of the Home Service woman both as a front-line salesman and a public relations representative. Her role is made even more important, he said, by the fact that the domestic market for gas is made up primarily of women.

At the Conference Luncheon on the meeting's first day, the delegates were greeted by Eskil I. Bjork, Chairman of the Board, The Peoples Gas Light and Coke Co.

Wister H. Ligon, A. G. A. president, delivered the keynote address: "Home Service—Full Speed Ahead."

Mr. Ligon, after painting a dramatic picture of recent gas
(Continued on page 33)

A Gas TV commercial is born

Three years of national network television have helped to produce a new public image of gas as a modern, automatic, superior fuel. Responsible for these improved consumer attitudes are the convincing demonstrations of gas and gas appliances contained in the A. G. A. television commercials. Here, the A. G. A. MONTHLY looks behind the scenes and examines the many steps and hundreds of man hours which go into the production of a single 60-second gas commercial.



3. Under Chairman Dick Leusch, members of the A. G. A. Domestic Advertising Committee's TV liaison group meet to review proposed copy. In addition to script approval, committee and staff consider the agency's recommendations on production studios and estimates of cost.



4. A. G. A.'s TV commercials feature action demonstrations of modern gas appliance features performed by TV's popular commercial personality, Julia Meade. Sometimes, as shown here, animated demonstrations are prepared prior to "shooting" for use in the finished commercial.



5. A studio signed and shooting dates established, attention turns next to logistics. Here A. G. A.'s special service representative, Chet Wegener, checks out one of the scores of appliances which must be ordered and trucked to the scene of shooting.

8. In the client viewing booth the final result is reviewed by Messrs. Leusch and Lane and Lennen & Newell's TV account executive, Dick Eyman. The video tape process offers instantaneous playback, so this commercial is ready for the air.





1. At the root of all A. G. A. advertising is consumer research. Not a word of copy is written until exhaustive interviews have determined what the housewife wants most from her appliance. Further testing suggests the most effective way of demonstrating the advantages of gas in fulfilling these demands.



2. Words, precious words! So much to say, so little time to say it. Here, guided by the Lennen & Newell, Inc. account group, the advertising agency team converts the findings of research into the first draft of script and storyboard. A dozen approaches may be tried and discarded before presentation to the A. G. A. committees and staff.



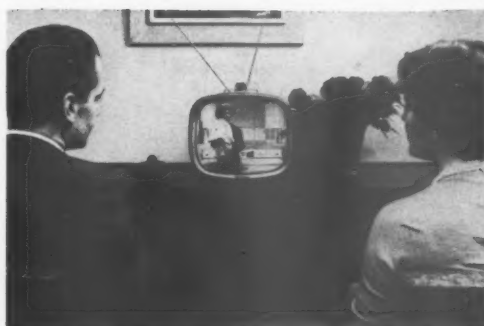
6. At CBS Studio 65 in New York City shooting is ready to begin. A last-minute cut is discussed with Julia Meade by Lennen & Newell's account supervisor, Tom Lane, Dick Leusch, A. G. A. Advertising Manager Ken Muldoon, and Lennen & Newell's creative director, Royall Smith.



7. "Only Gas gives you gentle, instant heat, so your wash comes out powder-puff soft, white and bright everytime . . . safe for fabrics, too." . . . It's lights, action, camera as a gas clothes dryer commercial is recorded on video-tape. A. G. A.'s TV commercials are produced either on film or on tape, whichever medium offers the most effective presentation of the particular script.

9. A tape of the A. G. A. commercials arrives at CBS Television City in Hollywood only hours later via Air Express. From this production center it will be fed over the network to 154 stations, thence into millions of American homes. Meanwhile, duplicate sets are shipped to utilities for use on their own locally-sponsored shows.

10. After all the hours of planning and production, the magic of national television projects into millions of homes convincing demonstrations in sight, sound and action of the modern and automatic features of gas appliances—at a cost of just a fraction of a cent per home!

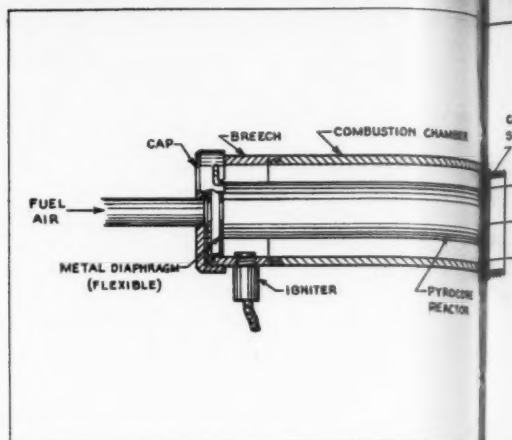


'Pyrocore' offers new concept in gas combustion



A lab man checks performance of a special high-temperature Pyrocore reactor operating in an experimental quartz cavity simulating the thermoelectric converter

*Developer of revolutionary new
'flameless' burner reports on technical
details of thermocatalytic device*



Cross-sectional drawing of Pyrocore in combustion chamber

By GERHART WEISS

*Director of Research
and Engineering
American Thermocatalytic Corp.
Mineola, N. Y.*

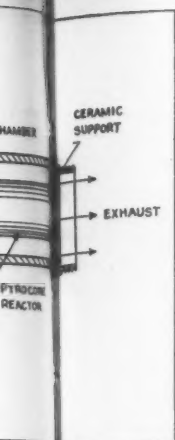
A revolutionary change in heating methods and practice is at hand, because of a newly-perfected process called "Thermocatalytic Combustion."

In perfecting the process, the American Thermocatalytic Corporation, of Mineola, New York, has taken a step forward in the generation and utilization of heat which foreshadows fundamental changes in the modern concepts of combustion in all its aspects.

The nucleus of the Thermocatalytic Combustion System is the thermocatalytic reactor, known by the trademark "Pyrocore." It is the carrier of the thermocatalytic reaction which is based on the maintenance of a predetermined,

Modular kiln, utilizing two Pyrocore radiant modules, achieve an operating temperature of 1,650°F in one size





Photograph of reactor, heart of Pyrocore system



Photograph of Pyrocore enclosed in combustion chamber

stable combustion state involving the feedback of thermal energy from the reaction zone to a catalytically active layer beneath it.

Let us consider a typical Pyrocore reactor of 30,000 Btu/hr output. It is a cylinder about a foot long and an inch in diameter. In operation it looks somewhat like a yellow fluorescent tube. Actually, its surface is incandescent at about 2,000°F. and it is producing heat at power densities exceeding 1,000 Btu/hr per square inch. It is ignited electrically, it cannot be blown out, and it works in any position. More specifically, its most generally applicable shape is that of a porous tube, open at one end and sealed at the other. A mixture of air and fuel (gas or vapor) is introduced into the open end under slight pressure and forced through the pores. Since the reaction takes place on the outer surface of the reactor, the com-

bined effects of both radiant and convection outputs are available.

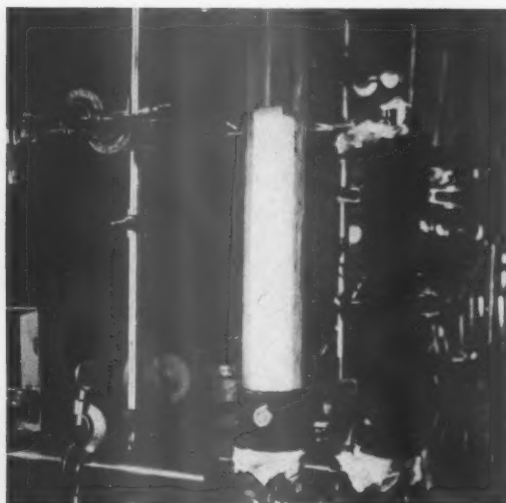
In convection service, the reactor is generally enclosed in a metallic chamber, followed by a relatively small secondary heat exchanger. The primary heat transfer from the reactor to the metallic chamber is principally through radiation, and augmented by convection. In cases where the metallic chamber is an integral part of a heat sink, or where its heat can be imparted to a flow of air or liquid, its temperature can be kept reasonably low. However, if left to operate in still air, the temperature of the chamber rises to the point at which it, in turn, becomes a very effective re-radiator. Up to 75% of the total heat output of the Pyrocore reactor may be transferred directly via this radiant chamber.

The secondary heat exchanger, therefore, has only about 25 per cent of the total heat output to recover. Because the

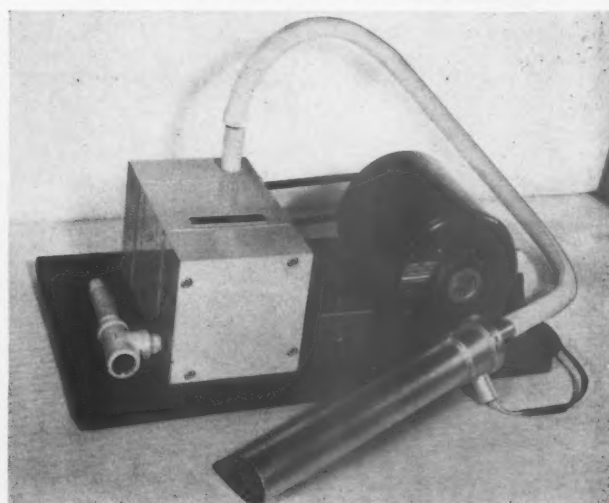
system is force-fed, quite narrow (and more effective) passages are used in this heat exchanger. Comparison with the standard wide passages needed by natural convection systems, which must handle virtually the whole heat output shows that, in this respect alone, Pyrocore systems make possible miniaturization and efficiency heretofore unknown for many applications. Equipment has been built which operates at over-all efficiencies of more than 95 per cent, in volumes less than half of those required for conventional equipments. Consequently, the costs of material, shipping, and warehousing are considerably reduced.

Thermocatalytic heating systems can be designed to produce the heat where it is needed, and no transfer medium need be employed to distribute thermal energy. This quality is of great advantage where the heat losses encountered

Pyrocore reactor in stand undergoing life test. Units have withstood over two years of operation



Experimental thermocatalytic combustion kit with essential components has been made available for study and evaluation



are considerable as in extended distribution systems.

Pyrocore is an extremely high power-density fuel-fired isotropic heat generating device, capable of delivering over 1,350 Btu/hr per square inch in free air. Many jobs, however, require lower power densities than those afforded by Pyrocore, such as absorption type refrigeration, environmental heating of electronic equipment and controls, and standby heating of engines, to name a few. For purposes such as these, American Thermocatalytic Corporation has developed the Infracore reactor which is fully catalytic in operation. It delivers power densities of up to 170 Btu/hr per square inch in free air, with the added advantage that no power source is needed when operated with bottled propane gas. The importance of this feature in connection with light, portable equipment is obvious.

Thermocatalytic combustion devices, through their unique properties, have shown themselves to be singularly well adapted to thermoelectric generators. At the present time several leading companies developing apparatus for the direct conversion of thermal to electrical energy are working with Pyrocore and

Infracore as heat sources.

Pyrocore will perhaps one day emerge also as the nucleus of an inexpensive and highly efficient after-burner for the purification of automobile engine exhausts. Preliminary laboratory tests have shown a reduction of hydrocarbon content of the exhaust stream from 8,500 to less than 20 parts per million.

Pyrocore reactors may be used directly in open air or in non-vented applications such as furnaces and ovens, or as radiant space heaters mounted in suitable fixtures. For vented applications, they are enclosed in ceramic or metallic sheaths from which the exhaust gases may be piped outdoors.

In this connection it is important to realize that input ratings, which constitute the customary method of classifying convection heaters, are not adequate to describe the performance of a radiant heater. Ratings for radiant heaters must be based upon the ratio of Btu/hr *radiant* output vs. Btu/hr input in order to have meaning. Since this ratio varies roughly as the fourth power of the emitter temperature, considerable effort is being exerted by American Thermocatalytic Corporation to achieve higher and higher operating temperatures in

Pyrocore reactors destined for radiant service. At any rate, the gas-fired emitter should operate at the highest possible temperature for best efficiency. Re-radiating means may be used to achieve longer wavelengths if desired.

The use of Pyrocore radiant modules for furnaces and kilns can simplify high-temperature processing considerably. These modules which, in effect, constitute the furnace walls, are used as building blocks permitting the assembly of furnaces, kilns, and baking or drying tunnels on the spot. Operating temperatures are invariably reached within seconds from a cold start, obviating stand-by and overnight heating of such equipment. Collaterally, control is accurate and virtually instantaneous. These qualities are quite important in the working of glass, metals, and ceramics, and in paint and ink drying as well as in commercial baking and food processing. In the aircraft industry, Pyrocore radiators have already begun to replace electrical tungsten-in-quartz tubes for the pre-heating of titanium sheet prior to forming.

Because of the innovations embodied in the Pyrocore system, and realizing the
(Continued on page 33)

Meet your Association staff



Dolores Marconi

Dolores Marconi, who long ago mastered the fine art of being efficient and friendly at the same time, is the secretary behind the Secretary of A. G. A.'s Industrial and Commercial Section. As secretary and unofficial administrative consultant to Ralbern Murray she has ample opportunity to display both her competence and her warm personality.

Dolores came directly from school to the Steno Department to become one of the mainstays of the Industrial and Commercial Section and of A. G. A. Her backlog of experience with her department is so complete that she can handle even the most recondite details with a certain nonchalance.

It was her long experience and her intrinsic courage that enabled her to help A. G. A. through a crisis in 1952 when the then Secretary of the Industrial and Commercial Section fell ill. Without hesitation, Dolores carried on with not only her own work but administrative duties besides. She still wears the gold watch that the people of the Section presented to her as token of their sin-

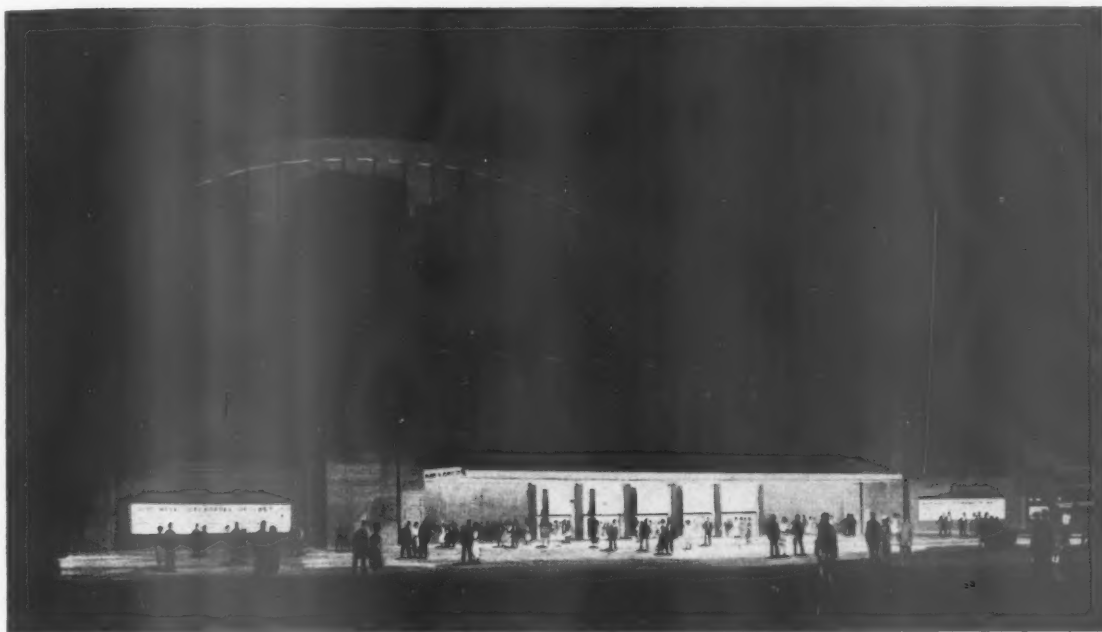
cere appreciation.

Over the period of years, dependable Dolores has met and maintained contact with many A. G. A. members. "When I go to a conference or to a school," she says, "it's just like seeing old friends."

For relaxation and pleasure Dolores, whose home is in Yonkers, New York, lists reading first and claims she would peruse even a calendar with interest. A virtuoso with crossword puzzles, she plays canasta and chess. Not to neglect the arts, Dolores is an opera fan, too.

She enjoys travelling and makes it a point to become an expert on any place she visits *before* she gets there. Last summer on a trip to Mexico, she found herself able to inform the guides of a thing or two about their native land. But the best-laid travel plans can go astray. Some time ago, on a visit to Los Angeles, Dolores headed off to church one morning in the general direction of a distant steeple. Some while later, having conceded herself irrevocably lost, she allowed a patrolling police car to make a graceful rescue.

Wraps off Convention 'package'



Atlantic City's huge Convention Hall and Auditorium are to be transformed by a \$3.5 million renovation

A new concept in conventions will greet more than 5,000 delegates to the A. G. A. Convention and "Festival of Flame" Exhibit in Atlantic City this October.

This year, for the first time, the A. G. A. Convention and Exhibit are being planned as one package. The "Festival of Flame" will open in the 100,000 square foot Exhibit Hall at noon on Sunday, October 9. It will show what is new and significant technically since October 1958, in residential, industrial and commercial gas appliances and equipment, together with a spectacular Operating Section display of major equipment and control devices used in all areas of gas operations. The "Festival of Flame" Exhibit will also feature a display of magazine-designed New Freedom Gas Kitchens and Laundries, a gas research display, and exhibits of

new developments by gas companies themselves. The entire "Festival of Flame" is expected to be approximately twice as large as the highly successful "Parade of Gas Progress" in 1958.

America's most compact convention city is spending \$3.5 million to completely modernize and transform its mammoth Convention Hall and Auditorium.

A visit to the enlarged and redecorated hall should open the eyes of even the most seasoned conventioneer who has "been there before."

Starting from the bottom, the innovations include the new, indoor street-level entrance reached by a vehicular driveway under the Boardwalk itself, a tunnel whose clearance permits double-deck buses and as many as 20 taxis to unload simultaneously at this weather-protected approach. Some 120,000 square feet of

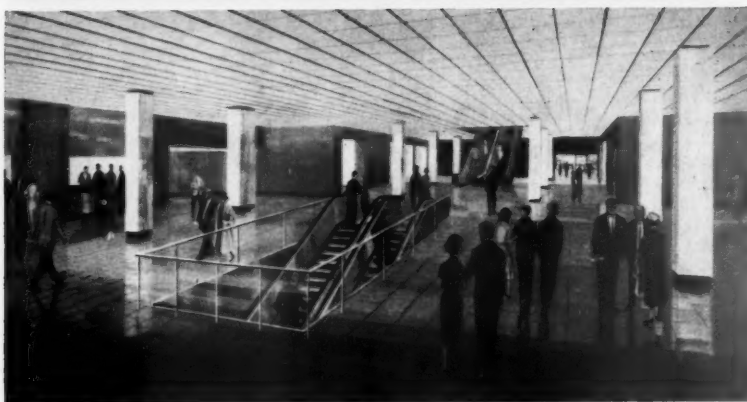
exhibit space is available on this lower level.

From here escalators rise to the attractive Boardwalk entrance and enlarged lobby. The front is glass-enclosed with all doors operated automatically by electric-eye beams. A 150-foot wide marquee of stainless steel, startlingly illuminated, stretches over the "Wooden Way."

The 100-foot wide lobby achieves a breath-taking effect through the harmonious use of bright, overhead lighting, blending colors, attractive furnishings and tasteful appointments, all in harmony with the rose-tinted marble floor, the graceful columns, the fully luminous ceiling and turquoise ceramic tiling.

There are 170,000 square feet of exhibit space available on this main floor, in addition to the large stage and two

Artist's renderings of renovated Convention Hall show glass-enclosed lobby, escalators rising to upper floors. Lobby doors will operate by electric-eye beams. Plans include many other improvements



sizeable meeting rooms. Electrically-operated, sound-proof partitions can convert the exhibit space into meeting rooms in a matter of seconds.

The mezzanine level, also reached by the escalators capable of carrying 16,000 visitors per hour, offers 30,000 square feet of exhibit space, including the Ballroom which can be set up to handle a banquet for 2,200 guests.

In addition to the escalators, two descending ramps from the mezzanine floor to the main lobby will handle any overflow, enabling visitors to move anywhere in the huge hall easily and speedily.

To millions of Americans, Atlantic City means convention city. The resort has entertained more of the big national conventions and exhibits more frequently than any other city. Visitors like its compactness. Here all facilities center on the Boardwalk where everyone meets everyone else in attendance. Convention Hall is a short, pleasant stroll from the hotels and motels.

Now, in addition to featuring the greatest concentration of convention facilities available anywhere, Atlantic City can boast of having one of the most modern and attractive convention halls

in the world when the re-modelization is completed on June 30, 1960.

Thirty-three beautifully decorated meeting rooms, seating from 125 to 35,000 persons, are being constructed. Harmonious use of marble, glass, ceramic tile and stainless steel will achieve a strikingly modern effect.

The new meeting rooms adjacent to the Exhibit area will make it possible for the first time to hold all sessions of the gas industry's national convention in the same building. Special restaurant facilities also are being planned near the "Festival of Flame." Thus, delegates and guests will be able to "make a real day of it" at the A. G. A. Convention. Following the general sessions in the morning, they can visit the Exhibit, then enjoy a leisurely lunch in the same building. After lunch, they will be able to attend the various Section meetings in rooms a few feet away from the Exhibit Hall. Later in the afternoon, they will be invited to participate in Section tours of the "Festival of Flame."

The ladies will also benefit from a unified Convention and Exhibit. A special program of ladies' events will be published, including a morning general session, coffee hour, tour of the Exhibit,

ladies luncheon and party.

As in previous years, separate headquarters have been designated for each Section so that members with similar interests can be located in the same hotel. Most Atlantic City Hotels have made extensive renovations and improvements since the last A. G. A. Convention there in 1958. Many handsome new motels and resort motels have been completed in the past few years, some of them offering suites, swimming pools, cocktail lounges, coffee shops, and other hotel-type services.

Two of the newest and most attractive motels are included in the following list of Section headquarters:

- Accounting Section—Chalfonte-Haddon Hall Hotel
- General Management Section—Dennis Hotel
- Industrial & Commercial Gas Section—Traymore Hotel and Colony Resort Motel
- Operating Section—Shelburne Hotel and Empress Motel
- Residential Gas Section—Traymore Hotel and Colony Resort Motel

The four-day Convention and Exhibit
(Continued on page 38)



Industrial relations round-table

Prepared by
A. G. A. Personnel Committee

Edited by W. T. Simmons

Assistant Personnel Manager
Philadelphia Electric Co.

● **Company growth and personnel administration**—In the January-February, 1960, issue of *Personnel*, Dr. George S. Odiorne of the University of Michigan discussed what the Personnel Department should do in response to the challenge of today's growth. He said that perhaps the saddest fact about personnel administration is that the old "personnel movement," which began in the 1920's and faded after World War II, was too innocent to live. Launched in the wave of idealism that followed the war to end wars, it attracted crusaders and do-gooders of high principles and abounding naïveté. At the time, such a movement was undoubtedly needed to remedy the abuses of callous management and socially irresponsible factory managers. It did succeed in virtually eradicating fatigue from work and inculcating the widespread practice of human relations in industry. Over the years, however, most of the stardust has been shaken out of personnel administration. Left behind is a residue of hard businesslike procedures. Dr. Odiorne further indicated that personnel administrators still cling in many respects to the archaic habits of the 1920's and apparently are unaware that their primary mission has changed from making people happy to making them creative and productive.

He further inquired how effectively personnel administrators have adapted themselves to the climate of growth. Although a minority have sensed the trend and moved rapidly into more appropriate programs and policy-making, far too many continue to practice the rites of the profession as if nothing had changed since 1925. Consequently, more and more key personnel functions have been allocated to other departments.

Dr. Odiorne believes that personnel administration must act not as the motor for growth, but as the line through which the energy flows. It must be the control lever that checks the runaway forces of unequal growth or provides the impetus for the inert engine. He feels it is entirely possible that, by focusing its efforts on creativity and productivity, the personnel department will coincidentally stumble upon the very thing at which it has been waving its butterfly net all these years without managing to capture a single specimen—morale. He stated there is now a fair amount of evidence that people who are busy producing something useful and tapping their inventive skills are normally free of discontent.

● **How to package a compliment**—Mr. Richard Osk in the December, 1959, issue of

The American Salesman stated that the dictionary defines a compliment as "a ceremonious expression of approbation, civility, or admiration," while flattery is defined as "insincere or excessive praise." The line between the words is thin. When you toy with a person's vanity, you are playing with dynamite. Still, a graceful compliment is often a sure way to break down the natural reserve between strangers, and it is a vital technique for salesmen.

How do the experts do it? One top-ranker finds that executives feel personally complimented when you mention the efficiency or courtesy shown by their staffs. Another comments: "I try to say something to a prospect that gives him a chance to compliment himself." Knowing a prospect's interests and hobbies gives you a chance to share his enthusiasm. It is possible to pay a first-class compliment just by listening to someone talk about his interests. A compliment cannot go wrong when it is sincere.

● **Vocabulary—key to intelligence**—Mr. F. DeArmond in the December, 1959, issue of *The Toastmaster* suggests that the next time you read one of those books on "simplified" English for more effective communication you make sure the writer is practicing what he professes. Vocabulary is a measure of intelligence, and the effective use of language increases as vocabulary increases. Ability to speak and write simplified English is not a matter of cutting down vocabulary, but of increasing it. A large vocabulary enables you to be exact, and exactness means brevity. The habits of reading with a dictionary at hand and using words precisely are probably the most effective means to a better vocabulary. Words are precision tools; if you have a good stock of them you are equipped to do more jobs more efficiently.

● **NLRB Rulings—Unique remedy to fit novel discrimination case**—Faced with a novel situation, in which an employer's alleged unfair labor practices pushed employees into better-paying jobs with another employer, a National Labor Relations Board majority fashioned an equally novel remedy to fit the situation.

The question of remedy was raised by the Board's finding that Brown-Dunkin Company, Inc., a department store in Tulsa, Oklahoma, illegally terminated the services of its porters, maids, and elevator operators after they voted for representation by Local 245 of the Building Service Employees' Union. The company effectively farmed them out to a firm that performs building-maintenance services on a cost-fee basis. With the maintenance-service firm the employees received higher wages and fewer hours work. However, they lost in the transfer fringe benefits, such as discount-purchase privileges at Brown-Dunkin.

The Board found the department store's

action coercive and discriminatory, since it was intended to avoid dealing with the union certified as the employees' bargaining agent. The firm also violated Taft Act bargaining provisions by arranging the transfer of employees without consulting the union and by refusing to negotiate a contract.

What to do about a remedy, in view of the employees' wage gains, was a puzzle to the Board. If the usual reinstatement order was issued (causing the department store to resume its own maintenance services), the employees would be put back into jobs paying less. To avoid this, a Leedom-Rodgers-Bean majority ordered a two-step remedy: (1) a reinstatement offer to employees in the bargaining unit and resumption by the department store of the services in question if a majority of the employees accepts reinstatement, and (2) since "said employees appear to have benefited economically and may not wish their former jobs," the store shall bargain with the union only if a majority of employees accepts reinstatement.

● **Board obtained injunction against recognition picketing at newspaper**—The National Labor Relations Board said the Federal District Court for the Northern District of Oklahoma had enjoined, at board request, picketing of an Oklahoma newspaper plant for an unreasonable period of time—"more than 15 days"—allegedly for recognition purposes without filing a Section 9(c) petition for a representation election. The time period was counted from November 13, effective date of the new Taft Act restriction, Section 8(b)(7)(c), on recognition picketing.

The petition of Edwin A. Elliott, regional director of the board, identified the charging party as Edward K. Livermore and M. Iba H. Livermore, doing business as the *Sapulpa Daily Herald*. According to the petition, the ITU local is not a certified representative of any *Daily Herald* employee. No charge, he added, has been filed with the Board under Section 8(a)(2) of the act alleging that the *Daily Herald* has unlawfully recognized or assisted any labor organization.

In requesting that the picketing be stopped by court order, the board petition declared that the ITU picketing had induced suppliers, service companies, railroads, repairmen, and other persons not to make pick-ups or deliveries or to perform services at the *Daily Herald* premises.

One million safe man-hours

NORTHERN NATURAL GAS COMPANY announced completion of one million man-hours of work without a disabling injury, throughout its system in 12 states and Canada.

Safety director Marvin B. Travis said it was the first time in its history the company has topped the one-million mark on a system-wide basis.



First public showing of Arkla's new 25-ton gas heating-cooling unit was at company's Southwest Exposition booth



The A. G. A.-Lone Star booth displayed a prototype of an air-cooled gas engine unit featuring the PAR research-developed Continental engine



Bryant Manufacturing Company's booth exhibited the company's new three-ton remote unit, soon to be available in a larger tonnage

New gas air conditioners unveiled

New equipment and ideas in commercial and industrial gas air conditioning, some of which were unveiled for the first public showing, were on display February 1-4 at the second Southwest Heating and Air Conditioning Exposition in the Dallas, Texas, Memorial Auditorium.

The exposition, sponsored by the American Society of Heating, Refrigerating and Air Conditioning Engineers, coincided with the society's first semi-annual meeting.

A total attendance of more than 7,000, exclusive of exhibitors, was registered during the four days of the show.

In all, 10 booths showed gas summer

cooling equipment, and several others displayed improved gas heating furnaces as well as infra-red heating applications. Gas-fired boilers were also a popular display item.

Booths by Arkla, Ready-Power and Bryant-Carrier, and a combination Lone Star Gas Co.-A. G. A. industry booth, occupied a corner on the ground floor of the two-story exhibit area. These booths shared a common background of colorful plastic material and plastic brick. They had a gas light on the booth dividers and each area had a Harlequin-design flooring. This exhibit area was decorated by Lone Star's advertising department and display shop.

The Ready-Power booth exhibited a 110-ton engine compressor unit using Carrier compressor and V-8 International gas engine. The booth also had the 1960 model engine compressor unit from their standard line. This featured a revised control system which greatly improves wiring and service. The control system will be standard equipment on all units from 20 to 110 tons.

The A. G. A.-Lone Star booth displayed a prototype of an air-cooled gas engine unit featuring the long-life Continental engine which was developed under A. G. A. sponsorship. The display unit was for demonstration purposes and not currently in production, al-

though it is expected that several manufacturers will take advantage of these engine developments.

Bryant exhibited a three-ton, model 36-450, remote gas absorption unit which will be available shortly in the popular 4½-ton size.

The Carrier booth exhibited the company's latest model large absorption unit which made its first public appearance at the show. The new unit features a greatly-improved capacity control system which gives much lower part load fuel consumption and lower condensing temperature. Another improvement in the unit is that the motor starters for pumps are furnished and factory wired to the control cabinet. Sizes range from 52 to 1,000 tons in one machine.

Arkla Air Conditioning Corporation unveiled its new direct-fired 25-ton gas Model DF-3000 gas absorption cooling-heating unit. The DF-3000 is the first

medium- and large-tonnage absorption unit ever to provide both heating and cooling. It eliminates the need for steam boilers, condensate pumps and steam and condensate piping, making possible a relatively simple, economical installation.

Instead of using steam to boil the refrigerant-absorbent solution, the new Arkla unit utilizes a unique type of generator in which a bank of 30 individual burners, firing horizontally down tubes in the generator section, boils solution around them.

Also exhibited was the new model 500C Sun Valley Gas Air Conditioner, the new "Gasign" and Humphrey heating equipment.

The York Corporation exhibited a working scale model of their latest large absorption unit.

Trane Corporation showed a 100-ton absorption unit which features single shell construction offering possible in-

stallation in rooms with low ceilings. This was the first public showing for this unit, which is available from 100- to 350-ton sizes in a single machine.

Vector Engineering Company of Dallas showed its new air cooled gas engine condensing unit, known as the "Gas-cool." The unit is available in 5- and 7½-ton capacities.

I.C.E.D. Inc., of St. Petersburg, Fla., displayed a 10-ton engine-driven heat pump featuring waste heat from the engine to increase heating efficiency. The company also exhibited a 25-ton engine driven packaged water chiller unit.

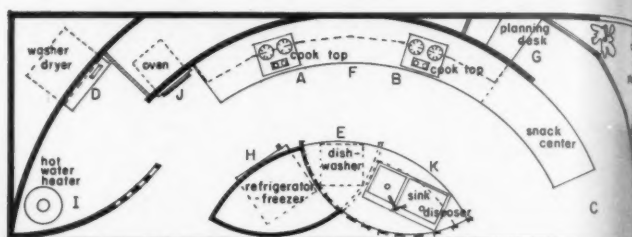
Dunham-Bush of West Hartford, Conn., exhibited an engine compressor combination using a Continental F226 engine with a Brunner compressor directly connected to the engine. This unit, which is currently in the experimental stage, will produce 25 tons when incorporated in a finished unit.



Ready-Power exhibited two engine compressor units for large installations. Featured was a revised control system, to be made standard. Other photos show crowds attracted to the air conditioning displays



Circular design focused on sink is functional, lovely



Floor plan of LIVING magazine's circular kitchen design shows how placement of sink at hub saves steps, allows more counter space near set-in gas surface burners. Extension of counter becomes snack bar



View from one end of circular kitchen shows breakfast area, a handsome expanse of cabinetwork, sink area partially concealed

*A. G. A. cooperates with editors
of LIVING for Young Homemakers magazine
to present two striking gas kitchens*

New kitchen creations aided by Home Bureau

Readers of the nation's leading "shelter" magazines—home-oriented magazines directed toward a mass circulation composed chiefly of women—may often pause to admire or covet the beautifully designed gas kitchens or laundries handsomely presented in their pages.

Great numbers are strongly influenced by these "dream" kitchens when they set out to buy or build new homes, or to remodel their own kitchens.

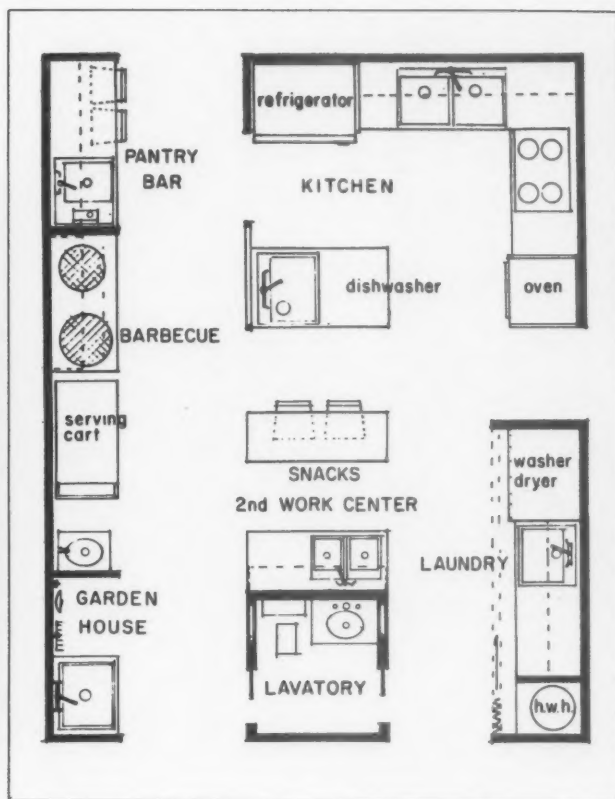
Yet, though these magazine kitchens become models for many, few perhaps know how they are created.

The process involves the cooperation of many agencies and individuals. And among them a key role is played by A. G. A.'s Home Bureau, formerly called the New Freedom Bureau.

Basically, the creation of a magazine kitchen depends upon three more or less unrelated groups—the magazine editors, the cabinet makers, and the gas appliance manufacturers. Contacting the



"Sink-oriented" kitchen featured in the January issue of *LIVING* magazine had sink facilities at each major work area



Floor plan of *LIVING* magazine's "Kitchen Efficiency Throughout the House" layout shows area relationships

editors, conferring with them upon kitchen and laundry ideas, providing liaison with the other groups, and arranging for supply of all necessary gas appliances by the appliance manufacturers are the central and indispensable functions performed by the Home Bureau.

Striking examples of magazine kitchens created and presented with the active assistance of the Bureau are two featured in recent and current issues of *LIVING* for Young Homemakers.

In its January issue, the magazine devoted several color and black-and-white pages to the kitchen shown at the right, above, together with adjacent laundry, pantry, barbecue and garden-center areas of a unified "Kitchen Efficiency Throughout the House" layout.

The basic idea of the kitchen-laundry-utility combination was suggested by Elkay Manufacturing Company's thesis that all of these areas should be sink-

oriented. In order to bring this thinking to the attention of consumers, Elkay, in cooperation with A. G. A., *LIVING* for Young Homemakers, and gas appliance manufacturers created a physical display incorporating its ideas. The major portion of the design work was done by the magazine.

To date, the Elkay display, in addition to being publicized in the magazine, has been exhibited at the 1959 A. G. A. Convention and the conventions of the National Retail Lumber Dealers Association, the National Association of Plumbing Contractors, and the National Association of Home Builders. Plans are for the kitchen also to be exhibited on various gas company sales floors.

The kitchen at left, above, and featured on the cover of this issue of the A. G. A. MONTHLY, may be seen in color in the March issue of *LIVING*.

Based on a unique crescent-shaped design of exceptional beauty, created by

the magazine's editors, the kitchen actually was a remodeling job. Nevamar Carefree Kitchens, manufacturer of laminated plastic cabinets, was a logical choice as supplier of the cabinets and molded counter tops for the unusually-shaped kitchen. In addition to its eye-catching qualities, the kitchen has functional advantages. Among them is the central positioning of the sink, the kitchen's most-used facility, at the hub of the arc. This arrangement concentrates footwork in one major area, saving steps without sacrificing spaciousness. Gas appliances include built-in gas oven and counter-top burners, built-in gas refrigerator, combination washer gas dryer, and gas water heater.

This lovely kitchen display, in addition to being featured in *LIVING* for Young Homemakers, has been exhibited at the 1959 A. G. A. Convention, the NAHB, NRLD and NAPC conventions and at several regional home shows.



*Led by Air Conditioning Promotion Task Force,
industry mounts national program to put gas on warm-weather map*

'Sell gas cooling in '60' campaign on

Gas industry resources currently are being mobilized for a nationwide campaign designed to sell more gas air conditioning in 1960 than ever before.

With the Bryant Manufacturing Co. joining Arkla Air Conditioning Corp. as national suppliers of residential gas air conditioning units, the industry is renewing and intensifying the promotional campaign which helped to launch Arkla successfully on the national scene in 1958.

Both manufacturers are introducing or going into production on new units this year. With additional equipment to sell, and a wider market as a consequence, utilities are expected to top all previous sales records.

The campaign also is expected to open the way for forthcoming products by Whirlpool Corp., Robertshaw-Fulton Controls Co. and A. O. Smith Corp.

The promotional campaign has been framed by the Air Conditioning Pro-

motion Task Force, an A. G. A. member group formed last year for the express purpose of organizing the new sales drive. H. William Doering, Springfield Gas Light Co., is chairman, and Robert D. Fink, The Gas Service Co., vice-chairman.

Goals and details of the 1960 campaign were spelled out at a meeting of the Task Force late in January, at which manufacturers and other associations in the air conditioning field



also were represented.

To put gas air conditioning more solidly than ever on the national weather map, A. G. A., the manufacturers and member utilities will coordinate sales and promotional efforts.

Through the Task Force, sales quotas are being assigned to local utilities, aiming at a minimum national quota of 20,000 residential-type for 1960. By 1966, the Task Force envisions, the industry should be selling more than 100,000 gas air conditioning units a year.

Companies are being asked to report on sales monthly, with these reports published in a periodical Air Conditioning Newsletter to be distributed to the industry.

The 5-year goal is expected to be attained through increased national advertising, greater local promotion and merchandising, accelerated dealer participation in air conditioning sales programs, stimulated by manufacturers and utilities, and the addition of more na-

tional manufacturers of gas air conditioning, beginning with the efforts of the current year.

At the Task Force meeting, A. G. A. reported plans for more than a half-million dollars worth of print advertising this year on gas air conditioning, plus a percentage of A. G. A.'s national television advertising, now being seen via *Playhouse 90*. The Task Force recommended that an increased percentage of the television time be devoted to air conditioning.

Other measures, including air conditioning speakers at major industry meetings, also were recommended, in order further to stimulate interest of local utilities.

Promotion and sales plans for 1960, in which utilities can participate, were reported in detail by the manufacturers.

Arkla outlined a 5-point sales program, based upon the following:

1. Maintaining price reductions realized to date.

2. Offering additional pricing incentives to companies which increase their sales efforts.

3. Offering special allowances for builder, employee and multiple-unit sales.

4. Continuation of a program for "trading out" old units.

5. Establishment of a minimum volume mark upon which to gauge future growth, and which will provide a volume versus selling-price relationship.

The 1960 Arkla sales program guarantees the same dollar benefits for each company as were realized in 1959, if that company continues to sell at its 1959 rate. Companies which top their 1959 sales rates will receive additional promotional allowances.

Arkla's sales and service force has been more than doubled in the past 18 months; most territories have been reduced by at least 50 per cent, and each of Arkla's five regions has a qualified

(Continued on page 37)

● *Northwest Natural Gas Company reports success in hydro-*

[illegible]

'Cameo' theme sells Blue Star gas homes



Northwest Natural's first all-gas Cameo Home. Wind and rain threatened disaster for the company's hopeful new promotion, but more than 2,000 persons braved the raw weather to attend the home's opening early in 1959

By DONALD W. HOSFORD

*General Sales Manager
Northwest Natural Gas Co.
Portland, Ore.*

As Portland's Northwest Natural Gas Co. began its Centennial year celebration January 1, 1959, our competitors in this part of the country observed the commotion with patronizing grins.

Their complacency was monumental. It had been accumulating, after all, for more than three decades. That elderly gentleman Gas (natural or otherwise), they felt, was too senile to be much of a threat in the big battle for new residential, commercial and industrial customers.

True, the hundred-year-old gas firm had been bristling with a new air of menace since 1956, when pipelined natural gas arrived from Canada, but our younger competitors believed the old boy lacked the teeth to win any tooth and nail fight for the tough Northwest market.

It would take an awful effort, the competing fuel men gleefully noted, for natural gas to get a good grip on the seat pants of a market already well saturated.

And so with titanic mirth they encouraged their "aged" antagonist:

"Go on, have a good time. You deserve a fling after all these years!"

Well, we flung. We're still flinging. But some of the "younger" competitors, we're kind of sorry to report, are finding the oldtimer's pace a little exhausting.

A major portion of the big change in Northwest Natural's position and outlook was wrought in one short year. It is the "Cameo" story. Since January, 1959, "Cameo Home" has become a household expression in the Portland marketing area. It is now a potent symbol directly linking modern elegance and the use of natural gas in the Northwest home.

In a recent poll by Northwest Natural Gas Co.'s Marketing Research department, 90 per cent of those questioned recognized the Cameo Home as an all-gas home.

In the same poll only 75 per cent recognized a "Medallion Home" as an all-electric home, although this campaign by one of Portland's two private electric utilities has been running for three years!

This reflects both the quality and the intensity of the company's promotional effort. Before the year was out the campaign led to the construction of a natural gas man's Shangri-La—an all-gas tract of 90 upper-middle class homes in a Portland suburb.

The Cameo Home theme, together with the coming of natural gas from both the American Southwest and western Canada, have dramatically lifted the Northwest Natural Gas Co. out of a long, lean period of relatively modest business activity. (Portland's new all-gas tract was the first such tract built here since the early 1930s.) As the company reaches the ripe old age of 101, the future seems to be naturally lighted with gas.

Before we examine the "Cameo" idea, it should be noted that Northwest Natural's promotion is identical to the 1960 Blue Star promotion of the American Gas Association.

The Cameo theme came not from a Chinese fortune cookie, but from the storming of the best brains in both our company and our advertising agency.

Early in 1958, company and ad agency people decided that a dramatic new approach to N. N. G.'s promotion would have to be found if we were to continue to build business in the face of the many variables that had altered our marketing position since the coming of natural gas.

Late in 1956, when natural gas first became available, Northwest Natural launched a crash load-building program to capture the circulating heater market, a market in which we have a substantial price advantage over competitive fuel. We found success, but by 1958 we decided that it would be unwise to spend more money trying to force this market. It has definite limitations in the damp Northwest.

With this basic decision behind us, the company's advertising and market-

(Continued on page 35)



Mrs. Cleo Maletis, Mrs. America of 1957, was the perfect hostess for Cameo Homes. She combined sales talks and "sensory sell"



With state and gas company both marking Centennials in 1959, Exposition Grounds were site for this \$75,000 Cameo Home of Ideas



Five new all-gas tracts in 1960 will follow this 1959 opening

Facts and Figures

Prepared by A. G. A. Bureau of Statistics

The Department of Labor reports that total housing starts in December, including public and private, was 82,300. This represents a decline of 9.7 per cent from the 91,100 units begun in December, 1958. Total housing starts in 1959 amounted to 1,376,900, a figure just short of the 1950 record of 1,396,000 but well over the 1,209,400 for 1958.

The increased number of starts during 1959 contributed materially to the upward surge in shipments of all types of gas appliances during the year. Total shipments of gas-fired, central-heating units aggregated 1,339,200 units—an all-time high equivalent to a 19.7 per cent gain over 1958. Gas range shipments during the year totalled 2,016,900 or 6.3 per cent greater than last year. Shipments of automatic gas water heaters reached a new high of 2,957,200, while shipments of gas dryers also hit a new high of 476,590 units, up 26 per cent over 1958.

During December total sales of gas increased 6.2 per cent over the same month last year, totalling 9,381 million therms. This increase during a comparatively mild December was attributed to sales of gas to new customers added to gas utility lines through new home construction, the extension of gas lines into new areas, and an upswing in industrial production. The A. G. A.'s index of total gas utility and pipeline sales for December, 1959, was 287.3, an increase of 16.7 points above the December, 1958, index and 13.1 points above the 274.2 of the November, 1959, figure.

Industrial consumers used 3,702 million therms of gas during December, 1959. This is an increase of 4.8 per cent compared with the 3,534 million therms of gas sold to industrial consumers during December of last year. The reopening of steel mills on November 7, and the rapid recovery of steel production and its effect on steel users are prime

(Continued on page 36)

SALES OF GAS AND ELECTRIC RESIDENTIAL APPLIANCES DURING DECEMBER 1959

(WITH PER CENT CHANGES FROM THE CORRESPONDING PERIOD OF THE PRIOR YEAR)

	December		November		First Eleven Months, 1959	
	Units	Per Cent Change	Units	Per Cent Change	Units	Per Cent Change
RANGES (including built-ins)						
Gas	148,000	-18.2	168,600	-1.5	1,868,900	+8.9
Electric	n.a.	n.a.	144,000	+11.5	1,539,300	+27.2
WATER HEATERS						
Gas	195,400	-5.7	200,300	+1.6	2,761,800	+12.0
Electric	n.a.	n.a.	29,100	-55.3	716,300	-5.1
GAS HEATING—Total	72,600	-8.9	112,700	+7.4	1,266,600	+21.9
Furnaces	58,300	-11.1	87,600	+2.6	988,400	+25.4
Boilers	6,400	-12.3	11,300	+13.0	129,800	+12.0
Conversion Burners	7,900	+16.2	13,800	+45.3	148,400	+9.8
OIL-FIRED BURNER INSTALLATIONS	49,524	+11.1	62,031	+21.0	637,057	+12.1
DRYERS						
Gas	48,100	+0.3	58,260	+33.9	476,590	+25.9
Electric	86,530	-14.1	98,790	0.0	905,190	+9.9

Source: Gas Appliance Manufacturer's Association, National Electrical Manufacturer's Association, "Fuel Oil and Oil Heat," and American Home Laundry Manufacturer's Association.

GAS SALES TO ULTIMATE CONSUMERS BY UTILITIES AND PIPELINES DURING DECEMBER

(MILLIONS OF THERMS)

	1959	1958	Per Cent Change
Month of December			
All types of Gas	9,380.9	8,837.4	+6.2
Natural Gas	9,124.0	8,549.5	+6.7
Other Gases	256.9	287.9	-10.8
Twelve Months Ended December 31			
All types of Gas	87,774.2	80,219.4	+9.4
Natural Gas	85,461.9	77,807.3	+9.8
Other Gases	2,312.3	2,412.1	-4.1
December Index of Monthly Utility Gas Sales (1947-49 = 100)	81.6	101.9	-19.9

PERTINENT BUSINESS INDICATORS, DECEMBER 1959

(WITH PER CENT CHANGES FROM CORRESPONDING PERIOD OF THE PRIOR YEAR)

	December			November		
	1959	1958	Per Cent Change	1959	1958	Per Cent Change
Industrial activity (1947-49 = 100)	165	151	+9.3	156	150	+4.0
Consumer prices (1947-49 = 100)	125.5	123.7	+1.5	125.6	123.9	+1.4
Housing starts, nonfarm (thousands)	82.3	91.1	-9.7	92.3	109.4	-15.6
New private construction expenditures (\$ million)	3,108	2,900	+7.2	3,318	3,100	+7.0
Construction costs (1947-49 = 100)	179.2	171.8	+4.3	178.5	170.8	+4.5

*Life Table found useful
depreciation accounting analysis tool*

Current concepts in depreciation

By H. FRANK CAREY

*Long Island Lighting Company
Mineola, N. Y.*

During the past two decades we have seen the gradual acceptance by utilities of a statistical approach to the depreciation problem.

At the beginning of this period utilities were generally on a retirement reserve basis and quite satisfied if this reserve were adequate to meet current retirements with perhaps a little left over to take care of extraordinary retirements if they should come along. Plant was considered to be 100% intact if adequately maintained. If the need for an appraisal arose, the criterion was "observed depreciation" which entailed the taking of sample borings of pole butts to determine the degree of rot; cutting out sections of main to caliper the thickness of the walls; and other tests intended to determine per cent condition as related solely to the physical causes of wear and tear or action of the elements and without regard to technological or fortuitous causes.

In the meantime, of course, the life insurance companies had been under the necessity of developing a much more scientific approach to the question of adequate annual accruals for a reserve provision to meet all death claims. They could not stay in business if they confined themselves to provision against old age alone.

Current depreciation analysis practices within the utility industry are many and varied but, generally speaking, they are all based upon some adaptation of mathematical concepts as applied so successfully to the insurance business. Those

few companies which are still basing their depreciation accruals on unsupported managerial judgment are now

A. G. A.-EEL Spring Conference To Be Held April 25-27

The National Conference of Electric and Gas Utility Accountants, the annual joint A. G. A.-E.E.I. spring meeting, this year will be held at the Commodore and Roosevelt Hotels, New York City, April 25, 26 and 27.

General sessions will convene at the Commodore at 10:00 a.m., Monday, April 25. Following the general sessions, all Customer Activities groups will meet at the Commodore, and all General Activities groups will meet at the Roosevelt.

Among featured speakers will be the following:

Dr. Nicholas Nyaradi, director of International Studies, Bradley University, and former Minister of Finance for Hungary. His subject: "Free Enterprise or Disaster."

James K. Polk, partner, Whitman, Ransom and Coulson; "Economic Depreciation."

C. H. Dompke, partner, McKone, Badgley, Dompke and Kline; "Dividends Paid Out of Capital."

actively engaged in seeking a new approach. This approach generally looks for an incontrovertible mathematical

analysis of past experience; wherever possible, a similar analysis of current trends; and an informed judgment as to the future.

These same analyses are invaluable for several applications other than routine book depreciation, such as studies of revenue requirements of alternative engineering proposals, examination of the effects of liberalized depreciation, determination of economic replacement policy, and investigation of the profitability of various services.

The basic concept in a mathematical analysis of the past is a Life Table showing per cent of original plant surviving (still in service) at each age. In such a representation, the area beneath the curve (computed as the sum of successive ordinates at each age) constitutes the average service life.

This Life Table is produced from data in which all retirements are assembled according to age at time of retirement and compared with the total exposures at each age for a resultant Survival or Retirement Ratio Curve.

From the Life Table may also be produced a Retirement Frequency Distribution Curve which indicates the dispersion of retirements over full life with usually the "mode" or peak at or near average life. The mathematical concept of a "normal distribution" would call for 95% of retirements (as indicated by the area beneath the curve) to be embraced within a "2 sigma" range from the mid-point. The extent to which a particular distribution extends beyond these points is a measure of the extraordinary degree of dispersion.

These three curves, the Survival or Retirement Ratio Curve, the Life Table

and the Retirement Frequency Distribution Curve are all interrelated. The degree of dispersion as shown by the Distribution Curve is also evident from the Life Table and has a marked bearing on the reserve requirement. If the curve drops off sharply at the origin, indicating a large percentage of early retirements, it will reduce the average age and thus increase the accrual rate but the reserve requirement will be at a minimum. If, on the other hand, the curve remains near the 100% mark and then drops off sharply at the average age, it will decrease the accrual rate but the reserve requirement will be at a maximum.

This reserve requirement is mathematically expressed and represented by a fourth curve, the Depreciation Ratio Curve which is derived from the Life Table through a process of calculating Remaining Life Expectancy at each age. This curve approaches 100% with age but at a slower rate if there is a high degree of dispersion.

For many companies a direct approach through aged retirements against exposures at each age is not possible because of limitations in data, personnel or equipment. In recognition of this fact, several mathematicians have devoted considerable thought and energy toward the development of generalized Life Tables and of systems for determining their selection for use in particular cases. The most widely known of these families of generalized curves are the Iowa curves as developed in 1935 by Dr. Robley Winfrey at the Iowa Engineering Experiment Station. (Recently augmented by the origin moded curves

of F. V. Couch, Jr.) The ones most used in New York State are the h-curves developed by Dr. Bradford F. Kimball which are based upon the truncated "normal distribution" of retirements.

Many companies which do not have fully dated property find that acceptable basic data are available in their plant accounts. Ordinarily data require review and modification in the light of intervening changes in accounting practices, corporate structure and uses of property. After all adjustments have been made, such data may be used in a variety of ways in conjunction with generalized Life Tables.

The method which seems to be attaining the greatest favor among companies without dated property records is the Simulated Plant Record Life Analysis as developed by the Public Service Electric and Gas Company through the efforts of Alex Bauhan, Paul Jeynes and lately William Caunt. (A similar method was also developed by Henry Whiton for Gulf States Utilities.) Briefly, this method seeks to match the book record of annual dollar balances by a trial and error process of applying successively the pattern of retirements of approximately 30 Life Tables (with different assumptions as to average service life) to each year's additions. By computing the sum of the squares of differences between book values and computed values, a selection can be made of the dispersion pattern and average service life presenting the least sum of squares and therefore deemed to be nearest the book record. In practice, some judgment has to be exercised to select the best fit between

choices involving high dispersion and high average age against another combination calling for a lower dispersion and lower average age.

The Simulated Plant Record method has, in the past, had limited use because of the large staff required to make the laborious calculations, in spite of many short cuts that had been developed. More recently, however, the entire process has been programmed for the IBM 650 and other computers, including the fitting process and the selection of best fit. The results are proving quite satisfactory and are being adopted by many companies which do not have dated property.

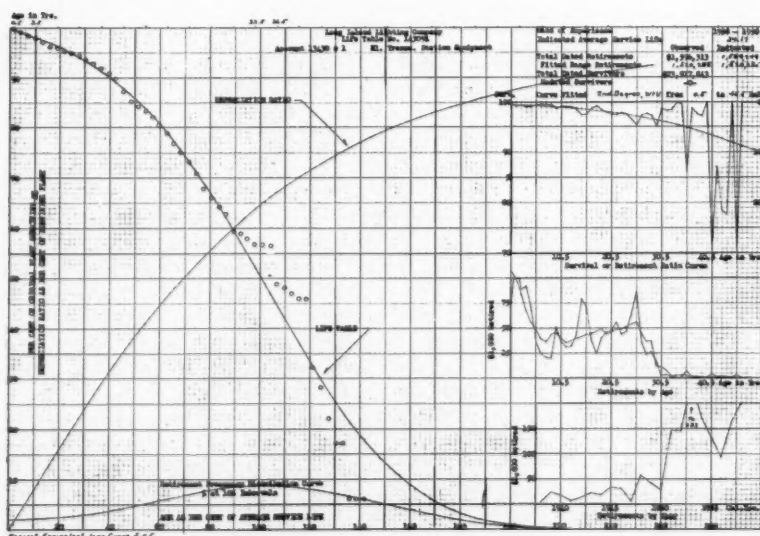
Other methods which have been in use by companies without fully dated property will be merely mentioned here since they are of less interest because of their limitations. Among these the Turn-over method requires a historical record equal in length to average service life or double that if real accuracy is to be obtained, does not enable one to study separate bands of experience for determination of trends, and is of no value in determining dispersion. The Half-Cycle Ratio method has similar handicaps although to a lesser degree. The Asymptotic method has these limitations as well as the requirement that the plant history must show a consistent pattern.

These various approaches have been rather widely covered in proceedings of the A. G. A.-E.E.I. Depreciation Accounting Committee, and particularly in the 1952 E.E.I. publication entitled "Methods of Estimating Utility Plant Life".

After all possible approaches have been considered, it must be recognized that the most satisfactory analysis of past depreciation history is that based upon actual aged retirements versus exposures of fully dated property over a considerable span of years. Such an analysis must be the norm against which all simulated methods are compared for a determination of their validity.

In preparing for an actuarial analysis the first step is the plotting of the observed data, usually in the form of its survival ratios against age. While it is expected that such a plotting will reveal a regression pattern running from a maximum at age zero to a minimum at the greatest age, in actual practice observed data are always erratic as shown on the accompanying chart. The problem

(Continued on page 36)





Don D. Bradley
Chairman
Steel Committee



Cecil O. Ellis
Chairman
Purchasing and
Stores Committee



Scott Hughes
Chairman
Committee on
Economics



John L. Kennedy
Chairman
Insurance Committee



Arnold R. LaForce
Chairman
Committee on Gas
Industry Finance
and Economics



John L. Liecty
Chairman
Committee on
Financial Management



William H. Loving
Chairman
Committee on
Comparison of
Competitive Services



Nelson
Chairman
Committee



Stuart B. Rowe
Chairman
Rate Committee



Marvin B. Travis
Chairman
Accident Prevention
Committee



W. J. Tremé
Chairman
Committee on
Marketing Research

Section committees cover wide range

The varied nature of the activities encompassed by the A. G. A. General Management Section is reflected by its committees. The wide range of responsibilities undertaken by these groups, indicated by the committee names, covers all management functions not specifically assigned to any of the other A. G. A. Sections.

While the Section itself is relatively new within the Association organization, some of the committees have a long history of industry service. One of the purposes in activating the General Management Section was to give these existing committees a proper setting in the

Association framework.

Other committees are of more recent origin. Some, such as the Gas Industry Finance and Economics Committee, were formed in response to increased industry interest in these fields, and the need to coordinate activity on a national basis. An example of the latter need is the Claims Committee, which was initiated a few years ago as a subcommittee of the Insurance Committee. Still other committees have been discontinued as it became evident that their functions could be performed more efficiently and with less manpower through combination with another committee.

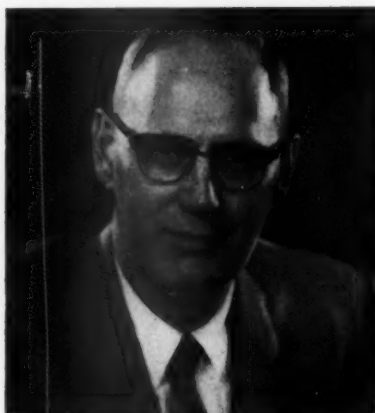
This healthy process of constant review, and change when necessary, is conducted under the general supervision of the Section Managing Committee. This policy group, composed of executives from representative member companies, the committee chairmen, and representatives of affiliated regional associations, acts as a guiding force both for the individual committees and for the Section as a whole.

The success and growth of the Section, which now numbers about 1,800 individual members, can be directly attributed to the work of the committees listed on this page.

Thermoelectrics, fuel cells conference topics



J. C. Darrow, chairman of A. G. A. Committee on Domestic Gas Research, joint sponsor



W. C. Davis, incoming president, GAMA, will be featured speaker at a luncheon



Dr. H. J. Rand, president, Rand Development Corp., will also speak at a luncheon



Dr. E. H. Smoker, A. G. A. vice-president, will deliver conference keynote address

Research as the hallmark of a successful business enterprise and its importance to the gas industry in particular will be examined by delegates to the 15th Annual Research and Utilization Conference to be held April 19, 20 and 21, 1960 at the Carter Hotel in Cleveland, Ohio.

A broad range of research activities and utilization problems in the domestic field will be reported on and discussed. Usefulness of the information will be expanded by informal audience-participation discussion periods after each talk. Thermoelectrics, fuel cells, gas air conditioning and house heating competition are among vitally important topics to be reviewed.

The conference is sponsored jointly by A. G. A.'s Committee on Domestic Gas Research, Joe C. Darrow, chairman, and the Utilization Bureau. Conference chairman is Paul W. Kraemer, vice-president, Minneapolis Gas Co.

The conference will be addressed at two formal luncheons by W. C. Davis, incoming president, Gas Appliance Manufacturers Association, and president, Cribben & Sexton Co.; and by Dr.

H. J. Rand, president of the Rand Development Corporation. Keynoting the conference will be Dr. E. H. Smoker, A. G. A. vice-president and president, The United Gas Improvement Co.

Up-to-the-minute reports will be presented on research advances and competitive aspects of the gas range. The status of gas air conditioning will be thoroughly reviewed, and new absorption and prime mover advances discussed. Manufacturers will give brief reports on their latest developments.

Down-to-earth discussions of the state of the art and actual significance to the gas industry of thermoelectrics and fuel cells will be presented. Latest advances in burner design, gas ignition research and changes in approval requirements also will be reported.

New advances in water heater designs and corrosion protection will be described. Experts outside of the gas industry will discuss gas incinerators, and the builders' view of the gas industry.

The conference program, because of its diversity of topics, is designed to interest both utility and manufacturing companies. Executives, technical experts,



Paul W. Kraemer, Minneapolis Gas Co. vice-president, will be the conference chairman

customer service and sales staff personnel are expected to attend.

Off-the-record discussions will seek answers to all questions which may arise, and an opportunity also will be presented to visit and tour the A. G. A. Laboratories on April 22.

As a convenience to the delegates, preregistration service will be provided by the Research Bureau at A. G. A.

*A. G. A. joins with AMA to
pioneer new workshop sessions for executives*

Seminar explores selling

A seminar, the first of its kind, on "Selling Utility Services to Industrial or Commercial Customers" was conducted on January 25, 26 and 27 by the American Management Association in cooperation with the A. G. A. Industrial and Commercial Gas Section.

The workshop seminar covered the fields of gas and electric, transportation and communication utilities. It was designed for experienced operating executives meeting in a small discussion group with other executives faced with similar problems and responsibilities, to exchange experience, outline their problems and learn of successful systems and methods used in other companies.

The informal, off-the-record, discussions were guided by two discussion leaders. They were Stanley F. Damkroger, assistant vice president, sales marketing department, American Telephone & Telegraph Company, and Frederick A. Kaiser, vice president and general sales manager, Michigan Consolidated Gas Company, who is also chairman of the Industrial and Commercial Gas Section, A. G. A.

Some 36 executives from all sections of the United States and eastern Canada registered for the seminar. Guest speakers covered a variety of subjects in the areas of marketing, sales and sales training.

The discussions were started off by a paper on "Special Problems in Selling Utility Services to Industrial and Commercial Customers" by Henry I. Strauss, president, Henry I. Strauss & Company, Inc., New York. Mr. Strauss stated that the public is more sensitive to actions of utilities because they have no choice of brands as they do with consumer prod-



Classroom set up at the Hotel Astor in New York was the site of the first A. G. A.-AMA workshop seminar for executives in utility field



Among speakers were, from left: Henry I. Strauss, G. R. Walton, Fred A. Kaiser, John Fratus, Stanley F. Damkroger, and E. L. Dare



AMA Marketing Division Manager Edward B. Reynolds, left, pauses to chat with seminar speakers John Fratus, center, and E. L. Dare



Vice presidents Fred A. Kaiser, Michigan Consolidated Gas Co., and Stanley F. Damkroger, AT&T, were discussion leaders during seminar

ucts. He went on to say that the public is not generally aware that utilities must make a profit and that there is a vast difference between a utility consumer and a product consumer. One of the major differences with gas or electric service is that they are sold on the premises and not through a retail outlet. In former years, continued Mr. Strauss, the utility salesman was at the bottom of the totem pole but postwar conditions have seen a change in management thinking tending to upgrade the sales force through a new emphasis on creative selling.

Speakers on the program only used about half of the allotted time for presenting their topics formally, thus leaving a generous amount of time for group discussion. Discussions after each talk were provocative and off-the-record, but a wealth of information was made available to the assembled group.

Dilworth H. Walker, partner, Cresap, McCormick & Paget, New York, spoke on "Organization of the Marketing Function," presenting 13 points on the fundamentals of planning. Part of his discussion was devoted to defining exactly the authority of a marketing executive, stressing that he must be free to exercise assigned functions and must be given a free hand in directing his marketing organization staff.

Then followed "Marketing Planning in the Utility Services Field" presented by W. W. Selzer, director of business promotion, Columbia Gas System Serv-

ice Corp., New York. Mr. Selzer detailed the company's analysis of industrial customer gas utilization. He demonstrated by means of a series of slides how Columbia assigned an index code to each customer and showed the relation of the index to that of the Federal Reserve Board. By this code, it is possible to estimate future demands of industrial customers in the various classifications of industry.

Mr. Selzer said, "The analysis of industrial gas sales . . . indicates that monthly sales figures classified by industry provides an advanced analytical tool. It is recognized that the problems in analyzing industrial sales will vary considerably among companies, depending on size, service area, contract provisions, and load characteristics. However, it is my hope that you gentlemen in sales will see a practical application of this procedure within your own company."

"Problems of Coordination with Other Elements of the Business—Finance, R & D, Engineering, Production, Etc." were discussed by Fred A. Kaiser, one of the discussion leaders. The main theme of his talk was that all departments in the company should know what is going on in sales, marketing and promotion. His company makes a point of having this information given to every employee.

A point receiving considerable emphasis was that an industrial and commercial sales program must interest consumers in such advantages as economy

in comparison to competitive services, labor-saving, and adaptability to better manufacturer techniques and better working conditions. Other attributes of utility service which may contribute to better community conditions, such as a reduction in air pollution or a saving in capital investment for consumers, also should be stressed in selling.

On the subject "The Use of Marketing Research in the Utility Services Field," Mr. Damkroger led the discussion by reporting in detail on A. T. & T.'s sales plan for the air industry.

On the second day of the seminar, "The Use of Advertising and Promotion in Selling Industrial and Commercial Customers" was discussed by Emil Hofsoos, vice president, Ketchum, MacLeod & Grove, Inc., Pittsburgh. Mr. Hofsoos observed that using advertising and promotion to influence industrial and commercial prospects is quite different from the emotional appeal of residential campaigns, the I-C pitch must be made by appealing to the pocketbook of the businessman.

Gas companies can reach local I-C prospects personally, since the number of such prospects is relatively limited. Therefore, advertising and promotion programs are regarded as involving a certain amount of wasted expenditure. This fact tends to hold down the amounts management will allow for I-C advertising and promotion budgets. Manage-

(Continued on page 34)

Midwest council spurs industrial sales

A record attendance of some 125 industrial gas engineers, equipment manufacturers and pipeline representatives gathered at the annual winter meeting of the Midwest Industrial Gas Council held in the La Salle Hotel, Chicago, on February 5.

Four excellent papers held interest for the assembled delegates as they all offered a promise of increased gas load.

The first speaker on the program was Richard R. Smith, development engineer, Caterpillar Tractor Co., Peoria, Ill., whose topic was "Sell More Gas By Promoting Gas Engines."

It is well known that Caterpillar has been making internal combustion engines for many years to power a variety of farm tractors and earth moving machinery. Recently the company has developed an engine powered by natural gas.

Mr. Smith stated that due to the availability of low cost natural gas, there was a steadily growing market for natural gas engines as prime movers in place of utility electric power.

He went on to discuss four aspects of gas-powered engines. The first covered typical applications for engines, including water pumping, the operation of cotton gins, and producing electric power for such locations as shopping centers, motels, and tollroad "plazas," for which natural gas lines would be more reliable as a power source than electric feeder lines. Then Mr. Smith discussed the use of direct connected engines for air conditioning.

His second topic was computing of gas engine operating costs. Mr. Smith discussed this subject in detail and showed how a high compression natural gas engine could easily compete with 1¢ electricity.

He then spoke on recent engineering developments improving the performance of the Caterpillar natural gas en-



Andrew J. Van Hoef, retiring chairman, Midwest Industrial Gas Council (second from right) greets the 1960 chairman, Frank J. Dawson. Vice chairman is George W. Bomier (extreme right), and Ira J. Roberts (extreme left) was re-elected secretary-treasurer of the Council

gines. One of the improvements is much higher compression ratios which can be used with natural gas—as high as 10.5 to 1. Natural gas will not detonate as do other fuels, (gasoline, butane) under high compression.

Mr. Smith's talk concluded with a short discussion on the selection and installation of engines for the many possible applications.

"Recent Developments in Gas Burner Design" was presented by Richard J. Reed, application engineer, North American Manufacturing Co., Cleveland.

Mr. Reed recounted seven new developments of his company which will give new tools to industrial gas engineers.

1. New burners in a variety of sizes which will improve temperature uniformity in furnaces.

2. Radiant tube burners which have new exterior spark igniters and a new glow gas pilot which gives visual indi-

cation it is on.

3. New metering and balancing orifices which give new accuracy at low cost for balancing systems for groups of gas burners.

4. Boiler burners and Atlas steam generators up to 430 bhp.

5. Steel mill burners for hot and cold air up to 20 M Btu/hr.

6. Hydraulic controls for accurate gas-air ratios.

7. New flat flame burners which give more uniform heat by directing the flame along the furnace wall thus increasing radiation over a larger surface.

The morning session closed with a short business meeting and election of officers for 1960, as follows:

Chairman—Frank J. Dawson, The Peoples Gas Light & Coke Co., Chicago, Ill.

Vice chairman—George W. Bomier, (Continued on page 36)

Utilities told 'water's fine' in '60 Hi-Load campaign



The A. G. A. 1960 HI-LOAD Commercial Water Heating Campaign is now under way. Although scheduled for the months of March, April and May, gas utilities may suit their own convenience in conducting a commercial water heating campaign.

A commercial planning guide already has been mailed to all member companies. The portfolio contains new promotional ideas, new sales ideas and other incentives to help add this profitable load to your lines.

Of interest to all are the new National Sanitation Foundation standards No. 3 and No. 5. These together with Information Letter No. 110, "Using N.S.F. Standard No. 5 To Sell Commercial Water Heaters," will provide commercial representatives with a valuable sales tool.

A new brochure containing many case histories is a feature of the portfolio together with a new form to be used in estimating and sizing. Manufacturers' literature also is included.

Sales conference to be held in Houston April 5-7

A "Decade Of Competition" will be the theme of the 1960 A. G. A. Sales Conference on Industrial and Commercial Gas, to be held in the Shamrock Hilton Hotel, Houston, Texas, April 5, 6 and 7.

Following custom, the three day conference will be divided into Industrial Gas Day on Tuesday; a general session on Wednesday when a formal luncheon, friendship hour and dinner will be held; and Commercial Gas Day on Thursday.

Speakers have been selected to convey this theme to sales executives, industrial gas engineers, commercial gas representatives and manufacturers of industrial and commercial gas equipment.

The three day program will be as follows:

April 5—Industrial Gas Day

"Natural Gas for Process Applications and as Raw Material in the Chemical Industry" (speaker to be announced).

"Industrial Development Techniques"—a skit to be presented by the Houston Industrial Development Team, composed of financial, transportation, communication and utility personnel, demonstrating their techniques for garnering a prospect in the booming Houston area.

"A New Man on the Team"—Wilfred R. Barnard, The Trane Company, La Crosse, Wis.

"Appraisal of Future Price Trends of Natural Gas and Competitive Fuels"—Roger L. Conkling, H. Zinder & Associates, Inc., Washington, D. C.

"Small Gas Turbines for Power Generation and Air Conditioning"—Frank Wright, Southern Union Gas Co., Dallas, Texas.

"The Economics of Gas Main Extension for Agricultural Use"—L. E. Nelson, Kansas-Nebraska Natural Gas Co., Inc., Hastings, Nebr.

"Operating Characteristics of Porous Medium Burners"—Dr. Rex T. Ellington, Institute of Gas Technology, Chicago, Ill.

April 6—General Session

"Profit by Your Research"—Charles H. Rutledge, E. I. du Pont de Nemours & Co., Inc., Wilmington, Del.

"The Facts About Gas and Electric Heat"—J. R. Hammers, Northern Illinois Gas Co., Bellwood, Ill.

GAMA PEP Prize Contest Awards—Richard T. Keating, Keating of Chicago, Inc., Chicago, Ill.

Hall of Flame Presentations—F. Thompson Brooks, Philadelphia Electric Co., Philadelphia, Pa.

"Russian Journey"—Robert O. Criger, Sheffield Division of Armco Steel Corp., Kansas City, Mo.

"Who Specifies and Who Buys"—C. L. Staples, publisher, *Actual Specifying Engineer*, Chicago, Ill.

"Have Trucks, Won't Truckle"—Desmond A. Barry, Galveston Truck Lines, Houston, Texas.

Gas Appliance Manufacturers "Friendship Hour" followed by annual dinner and entertainment.

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*Transmission-Distribution, Production
conferences to cover host of operating problems*

Three spring conferences scheduled

May is to be "Self-Education" month for technical personnel in the gas industry, with the Operating Section scheduling three conferences whose primary purpose is to serve as media for the exchange of information.

Distribution-Transmission

The Jung Hotel in New Orleans will be the site of the Combined Distribution-Transmission Conference from May 9 through 13, with over 1,400 operating men expected to attend from 50 states and a number of foreign countries. Nearly 200 individuals are scheduled to take part in the discussions, panels, symposiums, and technical paper presentations.

Subjects of concern to distribution companies are scheduled for the first

part of the week, while those of interest to transmission companies will be presented on Thursday and Friday. Topics of mutual interest will be discussed on Wednesday.

A total of 31 sessions has been arranged, including an outdoor exhibit of automotive and mobile equipment used in the gas and electric industries.

General sessions have been scheduled for each of the five mornings, at which will be discussed subjects of broad general interest. Subjects of more specific interest will be considered at sessions arranged by the various committees and subcommittees of the Section.

Highlighting the opening session will be an address by Wister H. Ligon, president of the American Gas Association and of Nashville Gas Co. S. W. Horsfield, vice-president, Long Island Light-

ing Co., will report on the activities of the Operating Section, of which he is vice-chairman. A "Welcome to New Orleans" will be extended by Gerald L. Andrus, president of New Orleans Public Service, Inc.; and Ian Stuart, of the Florists' Telegraph Delivery Service, will present a provocative and inspiring address entitled "Let's Face the Facts!"

The general sessions on Tuesday will include papers on "A Thinking Man's Heating System"; service installation policies; sampling of age change meters; maintenance dollar savings; and the relationship between operating personnel and claim departments.

On Wednesday, the general session will hear papers on top management and corrosion control; noise abatement at pipeline installations; non-destructive testing of pipe; and budgets.



M. Anuskiewicz
Chairman
Distribution Committee



H. C. Boone
Chairman
Corrosion Committee



C. W. Brown
Chairman
Gas Measurement
Committee



P. L. Covell
Chairman
Chemical and
Engineering Committee



J. H. Dennis
Chairman
Customer Service
Committee



L. L. Elder
Chairman
Transmission Committee



R. W. Hofess
Chairman
Committee on
Underground Storage



F. Vinton Long
Chairman
Communications and
Tele-Control Committee



Dean B. Seifried
Chairman
Manufactured Gas
Production Committee



A. W. Stewart
Chairman
Automotive & Mobile
Equipment Committee



C. Van Gundy
Chairman
Gas Dispatching
Committee

The general session on Thursday will be the first devoted exclusively to transmission personnel and will open with a greeting by Clayton L. Nairne, executive vice-president, New Orleans Public Service Inc. J. T. Innis, chairman of the Operating Section, will present a report on Section activities; and Joseph Barnett, of the U. S. Bureau of Public Roads, will discuss the Bureau's new policy on accommodation of utilities on interstate highways. Personnel training and selection for operating positions will be the subject of D. B. Sprow of the Houston Texas Oil and Gas Corporation; and the final presentation by J. M. Stricklin of El Paso Natural Gas Co. bears the provocative title "The Operating Team—What the Hell's Wrong With It."

The final general session of the week will be devoted to discussions of recent A. G. A. research on high strength pipe; underground storage; telemetering for billing; and the development of a manual on computing flow of natural gas in transmission lines.

An important feature of the general

sessions will be the showing of a new film on "Static Electricity," produced by the A. G. A. Accident Prevention Committee in cooperation with the U. S. Bureau of Mines.

At the Monday and Friday general sessions, presentation of Committee Service Awards will be made to the 1959 Chairmen of the committees which sponsor the two conferences.

Of the remaining 25 sessions, five will be conducted jointly by the A. G. A. Automotive and Mobile Equipment Committee and the Transportation Committee of Edison Electric Institute. There will be three sessions on corrosion; and two each on customer service; construction and maintenance; metering; distribution design and development; communications; compressor stations; and pipelines. One session will be devoted to each of the following: gas dispatching; gas measurement; and underground storage.

One square block of land, about 10 blocks from the Jung Hotel, will be taken over for the outdoor display spon-

sored by the Automotive Committee and EEI Transportation Committee. Although the equipment will be available for inspection throughout the week, the two committees have refrained from scheduling a session for fleet managers on Wednesday afternoon, to insure that they will all have time to visit the exhibit.

New Orleans Public Service is arranging a special program for the ladies attending the combined conference, including a Ladies Hospitality Room; a Friendship Hour; and a luncheon or sightseeing trip.

There will be no advance registration for the conference, although the Section's simplified registration procedure will enable delegates to register with a minimum of delay.

The registration fee has been set at \$35.00 for those registering on Monday and Tuesday; and \$30.00 for those registering on Wednesday, Thursday and Friday. The fee has been set at this level in an effort to make the conferences self-

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Home Service

(Continued from page 5)

industry growth, spoke in imagination—capturing terms of new gas appliances and developments in the offing. Products of research already available or soon to become realities, Mr. Ligon said, include gas infra-red cooking and heating, flush-top ceramic burners requiring no utensils for cooking, push-button remote-control ranges, instantaneous gas hot water heaters at the point of use, flameless burners, and plug-in gas appliances.

Swift as has been the recent growth of the natural gas industry, Mr. Ligon predicted, even greater growth is ahead—a growth in which Home Service will play an important part.

In the first afternoon session, Larverne Halverson, Minneapolis Gas Co., told how to handle the "Laundry Home Call."

The bulk of laundry home calls today deal with the gas washer-dryer combination, Mrs. Halverson said. "Records show these combos are staying in the homes—they're staying sold. And better yet, we are now finding that a large portion of our sales are being made to neighbors, friends and relatives of the first customers. At least a part of our customer's satisfaction can be credited to our home service department for we put forth a special effort to make a home call, as soon as possible, after the combo is installed. Thus the homemaker gets prompt and personal instruction on the proper use of the appliance. On combo calls we actually take a load of the customer's laundry and go through the full washing and drying operation in the machine with her."

Patricia A. Huff, The Ohio Fuel Gas Co., Columbus, Ohio, gave the delegates some new ideas on "Laundry Floor Stoppers." These were techniques and "gimmicks" for arresting the attention of passing visitors to a laundry demonstration area. A few typical suggestions were the following:

- Use a large (20-inch) facsimile penny to dramatize the penny-a-load story.
- Use baby clothes for the demonstration.
- Hold a spring cleaning clinic, washing and drying slipcovers, curtains, dustmops, blankets.
- Demonstrate no-iron sheets and pillowcases.
- Present laundry demonstration in a department store window, with a meter showing low cost.
- Wash and dry large feather pillows.
- Stage a "wash and wear" fashion show.

Evelyn Kafka, A. G. A., covered "News in Equipment." Mrs. Kafka presented a review of the latest technical developments making gas appliances the ultimate in modernity. Among these new or improved features are automatic timing and ignition, meat thermometers, rotisseries, high broilers, top burner thermostats, fold-away burners, open top hearth broilers, signal lights, char-broilers, infra-red radiant burners, ceramic tile burners and appliance outlets. Mrs. Kafka discussed each of the new technical features in detail, and described their many applications.

David McDermand, product manager, Hamilton Manufacturing Co., Two Rivers, Wis., gave the male point of view on "Meeting the Laundry Head-On." Home

Service women were the persons best fitted for the laundry sales task, he stressed, because of their natural rapport with the woman customer.

Other talks and speakers on the conference program were:

"Flame Selector," Pat Hendrick, Harper-Wyman Co., Chicago, Ill.

"Warming Oven—Low Temperature Control," Mrs. Shirley Pemberton and Madonna Bergman, Robertshaw Research Center, Irwin, Pa.

"A New Venture in TV," Mrs. Lou Adams, Nashville Gas Co., Nashville, Tenn.

"In Defense of American Cookery," Margaret Killian, University of Omaha, Omaha, Neb.

"Teachers' Viewpoint of the Gas Utility School Program," Mrs. Mary Mark Sturm, Chicago Board of Education, Chicago, Ill.

"Teachers' Dinners," Mrs. Myrtle Strahan, The Gas Service Co., Topeka, Kans.

"There Is Nuthin Like a Dame," James Diesing, Kansas-Nebraska Natural Gas Co., Hastings, Neb.

"Demos During Home Shows," Marie O'Brien, Providence Gas Co., Providence, R. I.

"Honolulu," Mrs. Aster Yamagata, Honolulu Gas Co., Honolulu, Hawaii.

"Don't Get Lost in the Dough," Mrs. Dorothy Healy, Lehigh Valley Gas Division, The United Gas Improvement Co., Allentown, Pa.

A breakfast preceding the conference tour of the Merchandise Mart was sponsored by the Harper-Wyman Co.

Arrangements for the Merchandise Mart tour were made by Margaret Spader, Home Service editor, Gas Appliance Manufacturers Association.

Pyrocore

(Continued from page 10)

inapplicability of many existing controls and components, the company has developed several new devices to fill in the gap. Not only do these devices provide components which were absent heretofore, but in many instances, as in the case of blowers, heat-exchangers, and ignition systems, equipment has resulted which materially improves the performance of the system while, at the same time, effecting considerable savings in size, weight, and cost. For example, the components mentioned will sell at prices varying from 18 to 25 per

cent of equivalent conventional ones.

The American Thermocatalytic Corporation does not plan to undertake the manufacture and marketing of finished equipment of any sort. The activity of the company consists of making available to manufacturers Pyrocore reactors, and other components which they may require, for incorporation into their products. In most fields of domestic appliances (except where prior arrangements prohibit) the company will itself design, construct, and test appliances which will then be made available for manufacture under license to reputable producers on a non-exclusive basis.

In order to pursue all the avenues of

application which present themselves, particularly in industrial and process equipment, an engineering staff of gigantic proportions would be required, and it is doubtful whether a staff of such size exists anywhere in the world. An effort has been made to surmount this obstacle by making available basic experimental Pyrocore kits which are designed to enable engineers in various branches of industry to evaluate thermocatalytic combustion and to undertake themselves the design of such equipment as they may require. In some cases, the company's own technical staff will undertake the development of various types of equipment on a contractual basis.

Seminar

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ment does not always understand the role advertising and promotion play in selling the I & C prospects. Still, these sales represent an extremely attractive load. To the average company, industrial and commercial sales represent less than 8 per cent of total customers but account for 63 per cent of the gas sold and 40 per cent of the sales revenues received.

Exhibits and displays have considerable value, including those showing gas equipment and the products made by using gas. They can be used in regional, state and local trade shows.

Mr. Hofsoos made seven conclusions and recommendations which led to lively discussion on advertising and promotion.

A panel discussion on "Case Studies in Successful Utility Service Marketing Programs" was started off by Mr. Damkroger of A. T. & T., New York, with a case history on marketing a new telephone device. The telephone industry's new Call Director, introduced in January, 1959, was a piece of equipment designed intentionally to obsolete a previous device which performed well in the customer's hands. The Call Director was designed to fit the needs of small, medium and large customers. Thus, it could be sold to existing customers who had outgrown present equipment, as well as to any new customers who needed more than the existing six-button telephone equipment.

Sales problems were solved largely by recognition that only the salesman, through direct contact, could realize the full market potential of this new product. Bell, incidentally, has about 7,000 salesmen selling the business market, and 1,500 of these concentrate on big business.

The transportation segment of the seminar was begun by E. L. Dare, manager of cargo development, United Air Lines, Inc., Chicago. The air freight industry suffered from poor market research right after World War II, Mr. Dare said. Because of such factors as the success of the Burma airlift and other air freight operations carried out by the military during the war, a huge postwar boom in air freight was expected. Hundreds of domestic air freighting lines sprang up, but only one remains. The boom never materialized.

In 1953, United realized that it needed a larger air freight business. UAL hired Dr. Howard Lewis of the

Harvard Business School to study the situation and develop a marketing plan. Dr. Lewis came up with what was called a "total cost concept" of marketing air freight to industrial and commercial customers.

Basically, this concept calls for "creative" rather than "competitive" selling. Because air freight rates are, at first glance, higher than those of other transportation rates such as rail or truck, the quality of service rather than price of service is the biggest selling point. It is necessary to analyze the true costs of shipping by air from the client or prospect's viewpoint, Mr. Dare pointed out.

Concluding case studies was H. Vinton Potter, vice-president, Oklahoma Natural Gas Company, Tulsa. Noting that his company is prohibited by law from merchandising appliances, Mr. Potter presented a step-by-step outline of ONG's program to increase commercial gas use and sales throughout the more than 150 communities served by the Tulsa-based company.

The commercial sales program actually launched in early 1957 began a year earlier with analyses of the commercial market throughout the service area. Opinions of customers and dealers were sampled to determine attitudes toward gas and gas commercial equipment, not only among restaurants and hotels but in the non-profit or institutional field.

ONG also employed experts in hotel and restaurant fields to conduct lecture series for customers and prospects. Five series of five lectures each on restaurant management and operations were attended by 516 restaurant men in ONG's area.

Newest sales vehicle is a 50-foot trailer recently purchased, to present demonstrations around the company's systems. The trailer already has carried the commercial sales story to about 55 of the 150-odd communities served by the company, and nearly 1,750 commercial customers and prospects have seen the demonstrations.

"Determining and Developing New Markets" by G. R. Walton, senior sales engineer, Houston Pipe Line Company, Houston, called for action by utilities to spearhead area development programs.

Public utilities are dependent upon the number of customers they serve, stated Mr. Walton, and they can be only as large as the communities they serve. Thus, it becomes imperative that the utility not only sell more to present in-

dustrial and commercial customers but strive to bring more customers into its service areas.

This means launching an aggressive and effective program of area development—a broad-base, long-range program of community expansion.

Jobs attract new residents to an area or community, but obviously utilities themselves cannot provide many of these jobs. The answer is to attract new industries and business firms. The value of these new industries cannot be measured solely in terms of gas or electric or telephone utility services sold to them. The new needs of the increased numbers of stores, restaurants, and service establishments which additional workers and residents require must be given serious consideration.

"Organization of the Field Sales Force" gave a wealth of information on what various companies were doing in this area.

The last day was limited to a morning session with two subjects programmed for discussion. The first was "Sales Personnel, Selection and Training" presented by John V. Fratus, training coordinator, The Connecticut Light & Power Company. Mr. Fratus advised his listeners that there are as many sales training problems as there are sales people, and that sales training was not a substitute for manpower development. He went on to show that classroom training was the smallest part of the operation and that most important was the on-the-job training from whence manpower development could be analyzed.

"Appraising the Field Sales Force Performance" was discussed by Mr. Damkroger, who pointed out that the Bell System has a continuous appraisal program of its sales force in all categories from the department head to the newest representative in the field. Commenting on these reports he readily admits they are not "gospel" as they only present an over-all picture. It is only through on-the-job supervision that job appraisal can be made effective.

In the collective opinion of those attending the seminar, it was one of the most successful projects of the Industrial and Commercial Gas Section. It has been suggested that the meetings be continued either in cooperation with the American Management Association, or as a Section activity in the form of a symposium reaching a larger cross section of the gas industry.

Cameo Homes

(Continued from page 21)

ing research departments and our advertising agency set out to get badly needed information about the mind and character of our residential market.

Reports from previous market surveys were read and re-read. Intelligence about the competition was studied and analyzed. Hours were spent in brainstorming sessions with front line personnel. Dr. Milton B. Davis of Portland State College was retained to conduct a consumer depth study in order to develop an accurate picture of public attitudes toward our company and product.

We found, among other things, that electricity was a more "acceptable" source of heat in the public mind than natural gas. But the absolute percentage of those preferring electricity to gas was not discouraging. The problem was there, but apparently not serious, and Dr. Davis added this footnote:

"It must be recognized that attitudes toward gas are generalized from very minor exposures."

The research also showed that considerable public acceptance was being built for natural gas at the new construction level. This encouraging trend was expected to mount because of the lower installation cost of gas equipment to the builder, and the new competitiveness of our natural gas rates.

From these facts it seemed evident that the greatest opportunities lay in creating broader acceptance for gas as a domestic heating fuel in order to capture a greater share of both the new home heating and replacement markets.

But our research turned up one other vital bit of information: Gas suffered the stigma of being an "old fashioned" fuel in the minds of many persons. We felt this attitude was due to two factors. First, the length of time manufactured gas had been in use locally. Second, the electric utilities' intense advertising of their product as "the" modern (and the most versatile) source of power.

The result of all this thought and work at N. N. G. was a decision to develop a completely new product personality for natural gas. We decided to create an image of modernity and product dignity. Essentially it boiled down to convincing the potential customer that natural gas was the ideal fuel for the heating plant of his new home. By proving this we knew we would also be

convincing those in the replacement market that "if gas is good enough for expensive new houses, it must be good enough for my older one."

What better way of creating this image of modernity than by bringing to public light sales success in the new home construction field? But this message could not be put across by ad copy extolling the virtues of gas, or by media exploitation of graphs showing the great increase in public acceptance of gas heated homes.

A symbol of modern gas usage was needed—one that could be dramatized and romanticized.

From brainstorming a symbol was born. It was the Cameo. Its connotation of beauty and elegance, its feminine appeal, the phonetic resonance of the spoken word and recognition of the Cameo as a gem of quality craftsmanship were the reasons for its selection.

In the planning of the campaign another problem arose. How do you go about glamorizing and romanticizing a heating plant? It is one of the most important parts of any home, but the one most likely overlooked when a new home is built. In this age of convenient fuel supply, the furnace is often hidden away in a dark corner of the basement or garage and given no further consideration until trouble arises.

A little more brainstorming gave us the answer. The gas sales story must be carried upstairs. Gas heating could best be sold through dramatic demonstrations of the more glamorous kitchen-laundry appliances. Here the superiority of gas over other fuels could be proven beyond doubt.

The rest of the Cameo story is largely the story of work in the field contacting builders, advertising production, media selection, and, the final touch, the employment of Mrs. Cleo Maletis, the charming and lovely Mrs. America of 1957, as Cameo Home hostess.

Mid-February, 1959, marked the opening of Northwest Natural Gas Co.'s new "Cameo" program. The first outdoor posting had been up for thirty days. Radio and television commercials were reaching thousands of new home enthusiasts daily, and the metropolitan papers of Portland had run the first Sunday classified display ad inviting people to visit the all-gas Cameo Home.

Then the weather turned to wind, rain and snow. We were disheartened and fearful that failure on the first open

house would spell doom to the entire program. But in spite of all adversities, 2,000 persons turned out to see the Cameo Home and to listen to Mrs. Maletis tell the natural gas story.

With this solid initial success new construction representatives of N. N. G. went to work in earnest. Thirty-five new all-gas Cameo homes were signed during ensuing months.

To earn the "Cameo Home" emblem, the builder must install A. G. A.-approved heating, water heating and cooking equipment. Gas refrigeration, clothes drying and incineration appliances are placed in the home on a display basis and are available to the purchaser at builder prices.

The builder participates in the company's general advertising program in all media the week prior to showing the home. Radio and television commercials are tagged with the builder's name and location of the home or tract. Four-column by ten-inch classified ads are run in the Sunday editions of the two Portland papers, featuring the house, the area, all equipment in the home, and the builder.

Mrs. Maletis has been an important part of the Cameo program.

Cleo personally talks to every woman who visits the homes. Often as many as 50 women will be grouped in the kitchen listening to Cleo explain the features of gas cooking. With the advent of the "all gas" concept in new construction, and with major manufacturers participating on a national scale, she is able to tie together all gas burning equipment in the home into a neat sales package.

Mrs. Maletis also employs what she calls her "sensory sell." On open house Sundays she keeps a large roast cooking in the oven. She also bakes cakes on the thermal eye top burner. Cleo credits this technique with a large share of her success in selling the superiority of gas service to the more than 75,000 women who visited the thirty-five Cameo homes.

For the Northwest Natural Gas Co. the "Cameo Home" program is well on its way to establishing a solid product identity, with acceptance and preference in the nation's strongest government subsidized electric market. Nearly 1,000 all-gas homes will be built during 1960 in the Portland area alone. Northwest Natural has contracts for five new all-gas tracts to be constructed during the year. Last but not least, Northern Natural is now capturing 60 per cent of the new home heating market.

Accounting

(Continued from page 24)

then becomes one of finding a mathematical formula that will smooth the data so as to find the true trend through a process of balancing the plus and minus deviations by a "least squares" method of fitting. What is required is a formula that is flexible enough to properly represent the life characteristics of many different types of property.

The Gompertz-Makeham formula which was developed for life insurance actuarial purposes has been used for property analysis but lacks some of the desired flexibility in that it places rigid limitations on the mortality data. It may cause some trouble since the fitting process takes place at the "Life Table" stage where variations in observed data become cumulative.

The orthogonal polynomial formula as customarily used has considerable flexibility but may lead to trouble because of its failure to give due weight to unequal values of exposures. A most efficient formula for this purpose is found in the Weighted Orthogonal Polynomials as developed by Sir Ronald A. Fisher and as adapted to utility use by Dr. Bradford F. Kimball. This formula may be used to any required degree and in various combinations to produce the best possible fit to observed data.

The methods adopted by the writer in the use of weighted orthogonal polynomials are covered in great detail in

his article "Machine Calculation of Depreciation Accrual and Reserve Requirements by a Modified Fisher Method" as published in the Proceedings of the National Conference of Gas and Electric Utility Accountants for 1959, and so will not be repeated here. These methods have now been followed for a second year's analysis of all depreciable accounts for a combined Gas and Electric Utility with some refinement in detail and with gratifying results.

In the past the chief obstacle to a depreciation analysis of any kind has been the tremendous amount of clerical and computation work involved. The general use of data processing equipment and particularly of high speed computers helps to overcome this problem. In our own case the data processing equipment available to us is somewhat limited in scope but we manage to program the more complicated computations for running by a service bureau on a high speed computer. Ours is a discontinuous process whereby a tabulated run at each step enables us to review the results and exercise judgment as to modifications in program that may be necessary for the next step. Currently, experiments are being conducted by Northern States Power Company in putting this method on their powerful IBM 709 through the Fortran program as a continuous process requiring only a few minutes for the complete run of an account. To date the results look quite impressive although it is to be expected

that some results would have to be discarded and new runs made if there is no opportunity to evaluate the interim steps.

It must always be borne in mind that any depreciation analysis, as described herein, is merely an attempt to reproduce past history in a usable form. It is a tool that is useful in the hands of a person who thoroughly understands his property, their accounts and the economic and growth conditions of the period being analyzed. He may choose to set up various bands of experience for separate study and will weight the results in the light of his knowledge of conditions within each such band or period.

The final decision as to rates to be used for accrual and reserve determination to meet future retirements requires a look into the crystal ball of the future. What one sees there will properly include something of what is behind him. As the history of the past continues to accumulate, it will continue to be reflected in the future prospects. Thus there should be, in truth, no "final decision." Only by a periodic review is it possible to be abreast of the situation. It is for that reason that it behooves each utility to determine the method best suited to its data, personnel, equipment and regulatory authority and to plan for its most efficient programming. It is to be expected that such planning will include the widest use of modern computers whether available on company premises or within a service bureau.

Midwest council

(Continued from page 29)

Wisconsin Natural Gas Co., Racine, Wis. Secretary-treasurer—Ira J. Roberts, Northern Indiana Public Service Co., Hammond, Indiana.

Opening the afternoon session, Lowell F. Crouse, vice president, Maxon Premix Burner Co., Muncie, Indiana, spoke on Gas Burner Applications in Metal Decorating Plants." He told about the latest improvements in the methods of gas firing the ovens used for decorating and coating metal sheets in the manufacture of cans and closures. Included were external air heaters on lithographing ovens.

His last topic was types of burners used and their application to fume incineration or air pollution control. A number of slides were used throughout the talk.

R. E. Miller, regional manager, York Corporation, Chicago, spoke on "Steam Actuated Air Conditioning."

Mr. Miller described the York absorption equipment and its economy in large installations when used in conjunction with steam turbine units from which the exhaust steam could be used to operate absorption chillers.

He also went into the growing market of plant air conditioning for both worker comfort and product protection. It was his thought that industrial gas engineers should seriously investigate the steam turbine drive for air conditioning compressors utilizing high pressure steam and the absorption chillers using low pressure steam.

Chairman Dawson, concluding the meeting, announced that the two-day Spring meeting would be held in Minneapolis, Minn., on May 19 and 20 at the Flemington Hotel.

Facts and Figures

(Continued from page 22)

factors in the increase in industrial gas sales. The economy was revitalized as industrial production in December recovered near to the record highs reached before the steel strike. The A. G. A. index of industrial gas sales was 266.1 (1947-1949 = 100) for the current December compared with the index of 254.0 for the same month last year.

The Federal Reserve Board has revised its index of industrial production. It now includes gas- and electric-utility output as well as various other changes, adjustments, and refinements. The revised index reveals more growth in the nation's output than the previous index had formerly reported. The F.R.B. index of industrial production for December, 1959, (1947-1949 = 100) was 165, up 9.3 per cent from a year ago.

Cooling campaign

(Continued from page 19)

field service engineer. This will result in more personal and individual contact and instruction in 1960.

In addition to its cooperative national advertising with A. G. A., Arkla has established a minimum budget of \$250,000 for local-level promotion. This budget is over and above promotional or incentive allowances provided for in the sales program. Utility programs which offer a reasonable assurance of increasing sales are eligible for a share of the Arkla promotional budget.

As part of its local promotional program, Arkla will offer several sales aids, as well as a "prize point" system in which points may be exchanged for merchandise or other prizes such as all-expense-paid trips.

A complete "Plans Book" on Arkla promotion is being distributed to the industry.

New products announced by Arkla for 1960 include a new 3½-ton Sun Valley remote unit for outdoor or add-on installation, and a new 25-ton direct-fired "all-year" water heater-chiller, introduced at the Southwest Heating and

Air Conditioning Exposition at Dallas in February. Production of the remote unit is scheduled for May. The 25-ton unit will be made available in July.

Bryant Manufacturing Co. reported that production already is proceeding on its 3-ton unit, with the Bryant 5-ton unit scheduled to go into production in April.

Utilities have been offered price discounts if they agree to scheduled monthly purchases. Bryant is engaged in an active exhibit program, participating in many trade and industry shows. The company also is conducting a factory service training program, which will lead to field training. Sales and application meetings are scheduled for spring.

Bryant is participating with A. G. A. in national consumer and trade advertising in 1960, and has numerous sales aids available for local promotion and merchandising. Items include ad mats, billboards, 16 mm. sound TV commercials, residential and commercial direct mail pieces, consumer color folders, wall banners and easel cards. Bryant has requested promotional aid from utilities on the local level, and information on the company's sales aids and plans will

be publicized through the A. G. A. Air Conditioning Newsletter.

Whirlpool Corporation reported that development work was proceeding on gas air conditioning units based upon applications of principles learned in development of the Whirlpool gas refrigerator. A unit of 5 horsepower or less, low in initial cost, air-cooled and adaptable to either forced air or water-chiller systems, is expected to be ready for field tests in 1961.

Robertshaw-Fulton Controls Co. announced that by 1961 it expects to be field testing 50 to 100 units of the free-piston engine compressor developed under A. G. A.'s PAR Research program at the Battelle Memorial Institute. Robertshaw-Fulton, which contributed more than \$1,000,000 to the Battelle program, was licensed to produce the units for use by manufacturers of air conditioning equipment.

A. O. Smith Corp. currently is testing in its laboratories a year-round unit which will provide three tons of cooling capacity in a compact package at a competitive price and at a low operating cost. Field tests are scheduled for summer, 1960, with 1962 as the target date for marketing.

Operating conferences

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supporting, in line with the Association's policy as set by its Board of Directors.

Production Conference

The Roosevelt Hotel in New York City will be the headquarters for the Production Conference on Monday and Tuesday, May 23 and 24. Two General Sessions have been scheduled for the mornings, and two sessions for each afternoon.

The first general session will open with a report on Section activities and the presentation of Committee Service Awards by H. L. Freuchtenicht, Consumers Power Co., who is vice-chairman of the Section. John Wagner, A. V. Smith Engineering Co., will present "Corrosion Control for Gas Production Facilities—A Case History." Supervisors, and how to make the most of them, will be discussed by H. C. Wyland, Commonwealth Services, Inc. W. L. Luther, of Ingersoll-Rand Co., will present the annual Builders Report; and the session

will close with three technical papers. Harry Perry, chief of the Branch of Bituminous Coal Research, U. S. Bureau of Mines, will discuss "Coal Research—Its Promise for the Gas Industry." L. L. Newman, chief coal technologist of the Bureau, will report on the gas industry in the Soviet Union; and C. G. von Fredersdorff of the Institute of Gas Technology, will discuss "New Methods of Generating Electricity from Gas Sources."

The second general session will open with a report on Canadian Natural Gas by Leonard Milano of Quebec Natural Gas Corp.; after which R. N. Papich, A. G. A. safety manager, will discuss gas industry accident facts. Gas storage will be the subject of two papers, one by O. G. Howe, Oklahoma Natural Gas Company, on "Conditioning of Gas from Underground Storage"; the other, by B. E. Eakin, Institute of Gas Technology, will be on "Unconventional Storage." The session will close with a discussion of "Radioisotopes in the Natural Gas Industry," by Dr. James Friend of Isotopes, Inc.

On the first afternoon, the Chemical and Engineering session will hear discus-

sions on molecular sieves; gas chromatography; and L. M. Van der Pyl, Rockwell Manufacturing Company, will present the latest supplement to the Bibliography on Gas Conditioning, of which he is the editor.

The Chemical and Engineering session on Tuesday afternoon will be devoted to odorization, with discussions on odor level as compared to odor intensity; soil absorption research; Austin Titrator; masking of odorants; odorant pumps; and deodorants.

A joint session on Manufactured Gas Production Planning and Gases on Solid Fuels will be held on Monday afternoon, with reports on gas pooling in New England; plant automation; cavern storage; high Btu gas from synthesis of CO + H₂; direct hydrogenation of coal; and hydrogasification of oil shale.

On Tuesday afternoon, the Gases from Fluid Fuels session will hear discussions on high Btu gas development; refrigerated storage of LPG and liquid natural gas; unconventional and refrigerated storage.

Registration will be held on Monday and Tuesday, with a registration fee of \$30.00 per delegate.

A.G.A. poster wins prize in art competition



This poster of the A. G. A. and member utilities won third place in the miscellaneous classification at the 28th National Competition of Outdoor Advertising Art sponsored by the Art Directors Club of Chicago. Cramer-Krasselt Co., agency; Earl Noffsinger, artist; A. H. Biermann, art director

Norge will build plant in Arkansas

J. S. SAYRE, president of Norge division of J. Borg-Warner Corp. has announced that Norge has selected Fort Smith, Ark., to build a million-square-foot, modern one-story plant. The plant will accommodate from 1,500 to 2,000 employees and will manufacture

Norge's new gas refrigerator and other gas appliances.

V. C. Rice, vice-president in charge of manufacturing and engineering, estimated that the new plant and equipment will cost in excess of \$10 million.

A.G.A. publishes third edition of American installation standards

PRINTED COPIES of the third edition of the *American Standard Installation of Gas Appliances and Gas Piping*, ASA Z21.30-1959, are now available from the A. G. A. and the A. G. A. Laboratories. The handy installation standard has again been printed in the convenient four-by-six-inch pocket size.

The new edition outlines standards governing installation of gas appliances and gas piping using low-pressure fuel gases not in excess of one half pound per square inch. It covers appliances and piping installations using undiluted liquefied petroleum gases that heretofore were not included. This expanded coverage was made possible through cooperation between the National Fire Protection Association, National Board of Fire Under-

writers, the Liquefied Petroleum Gas Association, and A. G. A. and A. G. A. Approval Requirements Committee. Extensive revisions have been included in the new Z21.30 report covering the venting of appliances and provisions covering air for proper combustion. Single-copy price is 50 cents.

The A. G. A. Laboratories have announced a publication discount schedule, which will apply to the above publication and to all American standard approval, listing, and installation requirements for gas appliances and accessories. The following discounts will apply to quantity orders for requirements publications having the same title: One to nine copies, single-copy price; 10 to 49 copies, 15 per cent discount; 50 to 99 copies,

A. G. A. studies stress

RESULTS OF A TWO-YEAR STUDY of the effects of secondary stresses on gas pipelines are summarized in a new 76-page technical report recently announced by A. G. A.

In the publication, entitled *Measurement of Secondary Stresses in Pipelines*, A. G. A.'s Pipeline Research Committee reviews stress-testing projects conducted throughout the country by 10 major gas transmission companies. These tests were planned and later analyzed by Battelle Memorial Institute researchers.

The principal objective of the A. G. A. sponsored program was to increase understanding of the magnitude of secondary stresses and their significance in the design and operation of transmission lines. The program also was aimed at acquainting gas pipeline engineers with the techniques of stress analysis and the optimum utilization of strain gauges.

Copies of *Measurement of Secondary Stresses in Pipelines* (Cat. No. 30/PR) are available at \$3 each from the A. G. A., 420 Lexington Avenue, New York 17, N. Y.

20 per cent discount; 100 to 499 copies, 25 per cent discount; 500 copies and over, 33 1/3 per cent discount.

Discounts will apply to any publication in the ASA Z21 series when ordered from the A. G. A., 420 Lexington Avenue, New York 17, N. Y. or the A. G. A. Laboratories, 1032 East 62nd Street, Cleveland 3, Ohio. Publication prices include normal delivery expenses to the customer. Orders specifying special handling, such as first class or air mail, will be billed for the additional shipping expense.

A list of the current American standard approval, listing, and installation requirements for gas appliances and accessories is available from the A. G. A. Laboratories upon request.

Sales conference

(Continued from page 30)

April 7—Commercial Gas Day

"The Latest About the Newest"—Raymond G. Juergens, The East Ohio Gas Co., Cleveland, Ohio.

"Fourth Dimensional Selling"—O. M. Heartsill, Jr., Oklahoma Natural Gas Co., Tulsa, Okla.

"Hot Off the Griddle"—L. Frank Moore, The Frymaster Corp., Shreveport, La.

"Let's Prepare a Proposal"—H. M. O'Haver, Southern California Gas Co., Los Angeles, Calif.

"Gas Goes to School"—A. B. Banowsky, United Gas Corp., Houston, Texas.

"A Sales Program for Commercial

Incineration"—Richard Goder, Joseph Goder Incinerators, Chicago, Ill.

"Ready Market for Commercial Air Conditioning Equipment"—Norbert K. Hall, The Ready-Power Co., Detroit, Mich.

HOTEL ACCOMMODATIONS

Hotel reservation requests should be mailed to The Shamrock Hilton, P. O. Box 1287, Houston, Texas, attention of reservation department. A business reply card is enclosed with the advance program, which already has been mailed, for convenience in making reservations.

Those committees having to do with industrial gas sales will meet on Monday, April 4. The commercial committees will meet on Friday, April 8.

Convention

(Continued from page 12)

will open at noon on Sunday, October 9 and conclude on Wednesday afternoon, October 12. Monday evening has been reserved for the President's Reception, dance and entertainment program. Following the third General Session on Wednesday morning, delegates will have an extra hour to visit the "Festival of Flame." They will then reconvene for a mammoth general luncheon and finale in the Auditorium of the Convention Hall. This event will be over by 2:30 in the afternoon.

Hotel reservations should be made on the official "PREregistration and Housing Application" and accompanied by the required number of \$25 fees.

Industry news

Boston Gas goes to straight natural gas

EASTERN GAS AND FUEL Associates and Boston Gas Co. have announced that Eastern's coke-and-gas manufacturing plant in Everett, Mass., will discontinue operations April 30, 1960. The company will change from mixed to straight natural gas in its central district during the period between April and August, 1960.

Eastern's Everett plant has supplied the manufactured gas that Boston Gas Co., a subsidiary of Eastern, mixes with natural

gas for distribution to 285,000 customers in the Boston area.

The availability of natural gas, which has drastically reduced the need for manufactured gas and a severe decline in the market for coke, have combined to make the continued operation of the Everett coke plant uneconomical.

The change will not affect gas bills or cooking speed, and the adjustment will be made without charge to customers.

Bulletin discusses research on the high-performance "nickel" burner

GAS COMPANY EXPERIENCES with a recently developed experimental, high-performance, range-top burner are discussed in a forthcoming bulletin to be published by the A. G. A. Laboratories.

Research Bulletin 80, *Gas Company Experiences with the Experimental High Performance Burner*, outlines studies and tests performed by utilization, servicing, and home service departments of eight utility companies on an experimental burner adapted to conventional ranges.

In 1954, an experimental, domestic, range-top burner was developed and introduced by the Laboratories to the industry as a single-duty burner incorporating increased performance, greater flexibility, and greatly reduced size as compared to most contemporary single-duty burners then available. Because of its small size ($7/8$ -inch-diameter burner head) this burner soon became widely known as the "nickel" burner. While the design was applied by interested manufacturers to ranges for field testing, A. G. A.'s Technical Advisory Group for Domestic Gas Cooking Research requested further development work be undertaken to improve heating speed with small-diameter utensils and to increase the

maximum burner-input rate with straight gas.

As a result of further studies on the nickel burner, a modified burner design was developed. It contained a larger burner head and larger ports, which were angled upward from the horizontal to produce a smaller flame pattern on the utensil bottom at full burner-input rates. This modified burner has been designated as the "high-performance burner."

To gain field experience with the high-performance burner, a number of utilities volunteered to test and evaluate it in their utilization, servicing, and home service departments. A number of range manufacturers generously offered to supply free-standing ranges and four-burner top-section burner boxes, which were modified by the Laboratories to include two high-performance burners, complete with ignition systems, in one half of each unit. Thus the high-performance burners could be compared with conventional ones. The choice

of tests was left to the discretion of utilities making the field comparison studies.

Research Bulletin 80 contains a discussion of the field comparison performance reports, as well as descriptions of the burner and its accessories. In most instances the high-performance burner was reported to have exceptionally good performance as a single-duty burner for low temperature operations, as well as medium- and high-temperature operations. Cooking tests used with the high-performance burner are also described. These cooking tests include low-heat operations together with simmering, boiling, low-frying, and high-frying performance.

Research Bulletin 80 was prepared by Forrest G. Hammaker of A. G. A. Laboratories. Copies of the bulletin may be obtained from A. G. A. or A. G. A. Laboratories, 1032 East 62nd Street, Cleveland 3, Ohio, following publication in April. The cost is \$2 each.

Gas only light in hard-hit Amarillo, Texas



When the second most severe ice storm in its history hit Amarillo, Texas, this winter, families owning electric ranges were forced to cook on floor furnaces or other gas-fueled appliances. In the ice-coated areas darkened by the storm, gas lights were the only source of light

Power forum includes gas

A FORUM DEVOTED to unconventional methods of generating power will be a feature of the 22nd annual American Power Conference to be held March 29-31 at the Sherman Hotel in Chicago.

Research experts will discuss the gas fuel cell, the nuclear rocket program, isotopic heat and power, and magnetohydrodynamics, with the presentation of about 95 papers and addresses on the power industry.

More than 3,000 are expected to attend the conference sponsored by Illinois Institute of Technology, in cooperation with technical societies and educational institutions.

Company builds 26-inch line

CONSUMERS POWER CO. has announced it will invest \$106,700,000 in 1960 on projects to expand and improve its natural gas and electric services in outstate Michigan.

Major gas department plans include completion of a 26-inch transmission main, connecting at the Indiana line with facilities of the Trunkline Gas Co., Houston, Tex., which will bring Consumers Power increasing supplies of gas from Texas and Louisiana. The company provides gas service in 29 counties.

Cooking with gas right from the start



Gas appliances for juniors are demonstrated by Julie Ann Kimble as she removes a "roast squab" from the toy gas range built by her father, Les Kimble, of Southern Counties Gas Co., Calif. Mr. Kimble also produced the one "Roper refrigerator" in existence, the toy model shown above.

Pacific Natural and Cascade Natural merge

THE MERGER OF Pacific Natural Gas Co. with Cascade Natural Gas Corp. has been agreed upon by directors of both companies, it was recently announced by O. Marshall Jones, president of Cascade, and Arthur Faragher, president of Pacific. The merger is subject to approval by stockholders, regulatory commissions of Washington and Oregon,

and the holders of certain other securities.

Stockholders of Pacific will exchange their stock for that of Cascade on a share-for-share basis. However, it is expected the exchange of stock will not be completed until the end of 1960. Meantime, operating supervision will gradually be taken over by the management of Cascade. Jones will succeed to the presidency of Pacific, pending completion of the merger.

Mr. Faragher pointed out that the merger will greatly enhance the possibility of bringing natural gas service this year to the area where Pacific holds franchises but is not yet providing natural gas service.

With the addition of Pacific's 14 communities, Cascade will serve approximately 20,000 customers in 42 towns in Washington and Oregon, with combined annual revenues after the merger estimated at more than \$10 million.

This is the third such merger for Cascade in several months. In October, 1959, it acquired Eastern Oregon Natural Gas Co., Ontario, Oregon, and Consumers Gas Corp., Bend, Oregon.

Symbol for an industry



Assisted by Managing Director C. S. Stockpole, Wister H. Ligon, A. G. A. president, lights one of two new Arkla gas lamps in the foyer of A. G. A. Headquarters

A. G. A. reports on burners

FACTORS INFLUENCING dust and lint collection on the underside of burner ports and methods for reducing the tendency through design are discussed in a forthcoming publication by A. G. A. Laboratories. Research Bulletin No. 79, *Minimizing Lint Stoppage of Atmospheric Gas Burner Ports*, describes research sponsored by A. G. A.'s Committee on Domestic Gas Research. Copies will be available in April, 1960.

Observation of field service records indicated that air-borne dust and lint particles entrained in primary air to appliance burners on occasion caused a build-up of deposits that affected flame characteristics. Yellow carbonizing flames resulted and eventually caused soot-clogged flueways and poor combustion.

A preliminary study by a gas utility indicated some burners were more susceptible than others and appropriate burner-head temperature at the port entrance may make a burner self-cleaning through a burning off of dust and lint. However, research indicated the problem could be attacked from two viewpoints; (1) design of burners to tolerate the presence of dust and lint in combustion air for long periods of time, or (2) elimination of dust and lint.

For the research a special apparatus was developed to provide a reasonably typical dust- and lint-laden atmosphere. Air shutter openings were kept clean of lint to assure that all reduction in primary air injection was caused only by port stoppage.

Copies of the bulletin will be available at \$2.50 each from A. G. A. or the A. G. A. Laboratories at 1032 East 62nd Street, Cleveland 3, Ohio.

1959 Maytag's best year

THE YEAR 1959 was the most successful in the history of the Maytag Co., manufacturers of gas and electric home laundry appliances, it was recently announced.

Consolidated net sales totaled \$123,070,470, an increase of 16.4 per cent above the 1958 total of \$105,763,763. Percentage increase in sales of home laundry equipment was reported to be substantially better than the seven per cent increase reported for the industry.

"Our excellent record for the year was made despite the adverse effect of the prolonged steel strike on fourth-quarter earnings," Fred Maytag II, president, stated. "The problems created by the strike, such as inventory unbalance, premium costs, and use of nonstandard material, continue to hold down production efficiency and have resulted in increased costs thus far in 1960."

Lynn Gas and Electric Company separates

WITH THE SEPARATION of Lynn Gas & Electric Co., Harold L. Dalbeck, president of the gas division of New England Electric System, has announced the formation of Lynn Gas Co. He said the separation would not affect service or existing rates but is a step to more readily permit a merger of the company into a larger subsidiary of

NEES.

With the addition of Lynn Gas Co., the gas division of New England Electric, headquartered at Malden, Mass., now includes eight gas companies in Massachusetts. Mr. Dalbeck said this gives the NEES gas division some 240,000 gas customers in the state of Massachusetts.

Robertshaw-Fulton opens plant in Mexico

A PLANT FOR ASSEMBLY and manufacture of automatic precision-control devices for the gas appliance industry in Mexico will be opened here by Robertshaw-Fulton Mexicana, S. A. de C. V. The facility, expected to be in production late this month, is a subsidiary of Robertshaw-Fulton Controls Co., which has headquarters in Richmond, Va. The plant is being put into operation because

of Mexico's vast economic expansion and its greatly increased market for modern automatic home appliances.

Russell F. Garner has been named general manager of the new facility, which will be housed in existing buildings in Mexico City's Vallejo industrial zone. Robertshaw also has new plants under construction in Turin, Italy, and Sao Paulo, Brazil.

Electrical analog helps to build pipeline

A UNIQUE ELECTRONIC machine to reduce costly piping alterations at compressor stations along new natural gas pipelines is being used at Worthington Corporation's new research laboratories in Buffalo, N. Y.

Called an electrical analog, the Worthington machine is the newest and most advanced of three analogs for this purpose in existence. It allows Worthington engineers to create electrical circuit analogies to predict machine and system performance before design and construction are finished.

Once the machine is set and turned on, vibration patterns in the proposed piping

produce a wave shape on a panoramic analyzer. Problems can be seen in advance and changes in plan made before costly construction work begins. In the past it was necessary to weld the entire installation before testing its efficiency.

Southwest Research of San Antonio, Tex., built the first analog in 1955 for the Southern Gas Association. The natural gas industry and heavy equipment manufacturers, such as Worthington, which supply machinery to the natural gas industry, contributed to the development. The analog was then made available for use by the participating firms.

Trunkline files with FPC for \$45 million expansion program

TRUNKLINE GAS CO. has filed with the Federal Power Commission a \$45.1 million expansion program, the second within a year. The expansion will effect a 200,000 Mcf daily increase to be delivered to Trunkline's corporate parent, Panhandle Eastern Pipe Line Co., enabling Trunkline to serve

the Indiana towns of Rensselaer and Knox.

Trunkline hopes to complete the program for increased service in time for the 1960-61 winter season. The company informed the FPC that it has 4.5 trillion cubic feet of natural gas reserves under contract to support its application for expansion.

Mansfield presents Norge



First gas refrigerator ever built by the Norge Division of Borg-Warner Corp. is previewed by Jayne Mansfield. It is on the market this month.

An \$82 million expansion currently in progress will increase Trunkline's capacity to the authorized 510,000 Mcf per day. It includes a 204-mile main-line extension to the Indiana-Michigan state line to serve Consumers Power Co., Jackson, Mich., and Michigan Gas Utilities Co., Coldwater, Mich.

Industrial standards sought

REPRESENTATIVES OF 17 national trade associations and technical societies recently voted to recommend establishment of an American Standards project on installation and utilization of industrial gas equipment at a general conference in New York called by the American Standards Association.

The conference recommended the project be sponsored by A. G. A. and titled Industrial Gas Equipment Installation and Utilization. Suggested scope was:

Establishment of basic standards for the installation, safe operation, testing, maintenance, and nomenclature of industrial gas utilization equipment and such remote in-plant gas-air proportioning and mixing equipment as may be employed with that utilization equipment.

These standards are to include in-plant gas piping supply systems and other engineering and design factors not covered by project B31, the American Standard Code for pressure piping, sponsored by the American Society of Mechanical Engineers. American Standards project Z21, also sponsored by A. G. A., has for many years covered the installation of domestic gas appliances and equipment. Tentative number for the new industrial gas equipment project is Z83.

A proposed American Standard drawn up by the Industrial Gas Practices Committee of A. G. A. and circulated as *Information Letter No. 90* will probably serve as the basis for work by a committee to be set up after the project is authorized by the ASA standards council.

Award for a million man-hours accident free



R. M. Jackson, distribution manager of Charleston Group Companies, W. Va., is shown presenting the A. G. A. Safety Merit Award to the firm's Huntington Distribution District supervisors. The 223 employees in this district worked from August 2, 1956, to October 31, 1959, attaining the accident-free million man-hours. The recipients are, left to right, (1st row) J. E. Patterson, J. E. Thorn, W. M. Reeser, Mr. Jackson, (2nd row) H. Atkins, H. E. Coffman, B. R. Adkins, O. M. Hunt, H. W. Schoenlein.

Highlights of cases before the Federal Power Commission

Bureau of Statistics, American Gas Association

Certificate cases

● **Algonquin Gas Transmission Co.** received temporary authority to install two 2,000 horsepower compressor units at the Cromwell, Connecticut, station and to construct about nine miles of loop lines in Massachusetts. These facilities, estimated to cost \$1.8 million, will provide winter peaking service to 13 existing customers.

● **Arkansas Louisiana Gas Co.** has been authorized to construct field facilities to take natural gas from independent producers in its general area. The total cost of the facilities will not exceed \$2.7 million, and each project is limited in cost to \$500,000.

● **Atlantic Seaboard Corp.** received temporary authorization to construct natural gas pipeline facilities necessary to activation of its Terra Alta storage project in West Virginia. The estimated cost of construction is more than \$25 million and includes about 43 miles of pipeline and a 5,500 horsepower compressor station. A part of this project will be to acquire certain properties from Hope Natural Gas Co. at a cost of \$2.6 million.

● **Colorado Interstate Gas Co.** has been authorized to construct natural gas facilities at a total cost not to exceed \$1 million. Each project is limited in cost to \$200,000 to expedite the purchase of natural gas from producers in the area of its pipeline.

● **Consolidated Gas Utilities Corp.** received FPC approval of its budget-type application to facilitate the purchase of new natural gas supplies when they are available in its general area. The cost of construction will not exceed \$750,000, and single projects are limited to \$100,000 in cost.

● **El Paso Natural Gas Co.** has been authorized to construct and operate natural gas facilities to enable it to acquire gas reserves in the East Maljamar and Kemnitz areas of New Mexico. The certificate covers an addition to a 3,520 horsepower compressor station of 960 horsepower to be acquired from the Tennessee Gas Transmission Co., the construction of two new compressor stations with a total capacity of 4,650 horsepower, 39 miles of field lines, 17 miles of fuel pipeline, and metering facilities at a total estimated cost of \$4.8 million. Completion of these facilities will enable the company to purchase up to 27 million cubic feet of natural gas daily from the Phillips Petroleum Co., which, in turn, will purchase part of this amount from the Tennessee Gas Transmission Co. In another application filed with the commission, El Paso Natural Gas Co. proposed to build lateral lines for metering and regulating equipment and to add sales taps to sell from 50,000 to 5 million cubic feet of natural gas per day to existing resale customers. The over-all cost of the facilities will not exceed \$798,000.

● **Natural Gas Pipeline Company of America** has filed a budget-type application

proposing the construction of facilities to enable it to acquire new gas reserves in the area of its transmission lines. The over-all cost of the facilities to be constructed would not exceed \$2 million. Single projects would be limited to \$500,000.

● **Northern Natural Gas Company's** proposal to develop an underground storage field in Kansas at a cost of \$42 million are being considered by the FPC at hearings that began February 29, 1960. The essentially depleted Otis Field will have a storage capacity of 182 billion cubic feet of natural gas when it is fully developed by November, 1963. The construction would include about 36 miles of gathering lines, 37 miles of transmission line, and a 7,000 horsepower compressor station.

● **Peoples Gulf Coast Natural Gas Pipeline Co.** has filed a budget-type construction application designed to facilitate addition of new gas supplies as they become available. Total cost of the facilities would not exceed \$1.5 million, and no single project would cost more than \$375,000.

● **Permian Basin Pipeline Co., Pioneer Gathering System, Inc., and El Paso Natural Gas Co.** received authorization to construct natural gas facilities for taking natural gas produced from fields in Texas. This action, previously filed by a presiding examiner, has now been adopted, with modifications, by the FPC. The facilities to be constructed by the three companies, at an estimated cost in excess of \$9 million, are designed to allow Pioneer Gathering System, Inc. to deliver 38.6 million cubic feet of natural gas daily to Permian Basin Pipeline Co. and to transport about 12.7 million cubic feet daily for El Paso Natural Gas Co. El Paso, in turn, plans to transport other gas owned by Pioneer Gathering System, Inc. The commission disagreed with the examiner's action denying Phillips Petroleum Co. a field price of 12.75 cents per Mcf from undrilled and unproven acreage and limiting the price to the 10.75 cents agreed upon in the Vinegarone Field. Sales of gas from undrilled and unproven reserves have been approved at the 12.75-cent rate.

● **Tennessee Gas Transmission Co.** has filed a budget-type application proposing to construct from time to time various field compression facilities, which would be used to alleviate declining wellhead pressures and other problems. Each project would be limited in cost to \$400,000, with the over-all cost of all projects not to exceed \$1.5 million.

● **Texas Eastern Transmission Corp.** has received a temporary certificate to construct nearly 16 miles of loop lines at an estimated cost of \$3.6 million. These facilities will enable the company to deliver maximum daily quantities of natural gas totaling 212.7 million cubic feet to 22 existing customers. In another action, the company received approval of its budget-type application to construct nat-

ural gas facilities occasionally required to attach new supplies from independent producers in their pipeline area. The total cost of the facilities to be constructed would not exceed \$4 million, with single projects limited in cost to \$500,000.

● **United Gas Pipe Line Co.** received authorization of its budget-type application to construct field facilities to expedite attaching new supplies of natural gas as they become available. The total cost of these facilities would not exceed \$750,000. Single projects would not exceed a cost of \$200,000.

Rate cases

● **Natural Gas Pipeline Company of America** has filed revised tariff sheets to effect an annual reduction of \$916,000 below the original proposed increase of \$5.1 million. This action is a result of the settlement of a rate case involving a supplier, Colorado Interstate Gas Co., approved by the commission on December 31, 1959. The \$5.1 million increase was proposed on March 2, 1959, suspended until September 2, 1959, when it became effective, subject to refund. The reduced amount will continue to be collected, subject to refund and pending final FPC decision.

● **United Fuel Gas Co.** has been ordered to reduce its annual wholesale natural gas rates by \$2.2 million per year for the period January 1, 1956, through July 13, 1957, and to make appropriate refunds to its customer companies. This case dates back to 1954, when the company initiated two proposed increases amounting to \$14.1 million on an annual basis. These proceedings, except for the issues relating to the treatment of income-tax deductions resulting from liberalized depreciation, percentage depreciation, and intangible well-drilling costs, were settled in October, 1956. The 1956 settlement required a refund of about \$3 million to nine wholesale customers in West Virginia, Kentucky, Ohio, and Pennsylvania.

SUMMARY OF INDEPENDENT GAS PRODUCER RATE FILINGS—DECEMBER, 1959

	Number	Annual Amount
Tax rate increases allowed without suspension	3	\$ 3,670
Other rate increases allowed without suspension	80	1,611,425
Rate increases suspended	243	17,937,668
Total rate increases	326	19,552,763
Tax rate decreases allowed without suspension	19	28,340
Other rate decreases allowed without suspension	—	—
Total rate decreases	19	28,340
Total rate filings	1,521	
Total rate filings acted on from June 7, 1954 to Dec. 31, 1959	43,983	

Rate increases disposed of after suspension	60	831,405
Amount allowed	59	829,472
Amount disallowed	—	—
Amount withdrawn	1	1,933
Rate increases suspended and pending as of Dec. 31, 1959		3,065 \$154,316,544

● In another FPC action, Michigan Wisconsin Pipe Line Co. received approval of a plan for the allocation of an additional 40 million cubic feet of natural gas per day. The commission stated the proposed plan appears fair and equitable and was arrived at as the

result of a free consensus and mutual accommodation of needs among the 23 utility customers in Michigan, Wisconsin, Illinois, Iowa, and Missouri. The original certificate authorized expansion of the system but ordered hearings on the allocation of the additional supply.

● In another decision, American Louisiana Pipe Line Co. was given a permanent certificate for the construction and operation of an 8,000 horsepower compressor station in Louisiana and a 10,000 horsepower station in Tennessee at an estimated total cost of \$6 million. These facilities will provide an addi-

tional 43 million cubic feet of natural gas daily that will go to Michigan Consolidated Gas Co., Michigan Wisconsin Pipe Line Co., Ohio Valley Gas Corp., and Northern Indiana Public Service Co.

● In seeking to exchange natural gas supplies with the Consolidated Gas Utilities Corp., Oklahoma Natural Gas Co. was denied exemption under the Natural Gas Act. The commission stated it was inevitable that some Oklahoma-produced gas, commingled with gas of the Consolidated Gas Utilities Corp. will be physically transported and consumed outside of Oklahoma.

Gaslight saves helicopters and crews downed in snowstorm

THE AGE OF GASLIGHT hasn't quite ended, as indicated by the role recently played in Kentucky by the so-called ornamental gas lamps in saving two helicopters and their crews.

It happened in the parking lot of Rockwell Manufacturing Co., Russellville, Ky., close to midnight. Six Army men were flying two military helicopters on a routine flight from Fort Campbell to Fort Knox.

Though the weather report at take-off time had been favorable, they were caught suddenly in a blinding snowstorm about 20 miles south of Russellville.

"It was so thick up there we didn't know where we were," reported Lt. Sam Childs, senior officer and pilot of one craft.

They turned north to Russellville where they could make out only two patches of light. One turned out to be a large neon sign on a restaurant, the other, a much larger one, was the gas-illuminated Rockwell parking lot.

"It was lit up like a landing strip," Lt. Childs marveled, "and, boy, it sure looked good to us."

Guided by gaslight, the two craft managed to make a landing in an adjacent field—after

realizing they might hit a car if they landed in the lot itself.

"We believe," said Lt. Childs, "that the gaslights saved our lives and the two helicopters."

New rate schedules published by Zinder

PUBLICATION OF the authoritative, complete edition of *Rate Schedules of the Natural Gas Pipeline Companies* (as filed with the Federal Power Commission) has been announced by H. Zinder and Associates, utility consultants.

First published in 1952, the booklet provides the pipeline industry and those interested in its pricing with detailed and reliable

data concerning rates, types of service, etc.

The annual subscription includes the basic publication and periodic revisions, which are provided in new issues published in accordance with changes in the rate schedules. Subscription may be obtained from the Publications Department, H. Zinder and Associates, Inc., 724 Ninth Street, N. W., Washington 1, D. C. Annual subscriptions are \$10.

Fold-away gas units in pipeline

SEVEN SOUTHERN CALIFORNIA gas company officials travelled to Washington, D. C., last month to urge approval of an interstate pipeline project that would bring 475 million cubic feet of natural gas a day into Southern California.

The men appeared before the Federal Power Commission in support of the Rock Springs pipeline project proposed by the El Paso Natural Gas Co., major out-of-state supplier for gas distribution companies in the South.

The Rock Springs project, which would bring natural gas to California from new sources in the Rocky Mountains, would require about 550 miles of pipeline at an estimated cost of \$150 million.

The Southern California and Southern Counties Gas Companies have an application pending before the California Public Utilities Commission for permission to build a connecting line from the state border to the Los Angeles basin to import the supply.

In their testimony before the federal commission the men pointed out that the local gas distributing companies have been connecting an average of nearly 100,000 additional meters annually, a gain equivalent every two years to the population of a city the size of San Francisco.



The Dixie Gas Fold-away, surface cooking burners that fold out of the way when out of use, will be used in the kitchens of Hathaway Manor in St. Louis, Mo., a new community of homes ranging in price from \$17,500 to \$40,000. The brushed chrome units made by Dixie Products, Cleveland, Tenn., when folded away take up less than one square foot of counter space and are counterbalanced to raise and lower at a finger's touch. They will be used in 90 per cent of the 500 homes to be built in 1960. The north St. Louis County community will consist of 3,000 homes when completed in 1962.

Winner chooses gas range feature by feature



Top winner in The Brooklyn Union Gas Co.-New York Mirror International Recipe Contest, Mrs. Gloria Sarkisian, picks her new gas range feature by feature, with the help of Julius Klein, president of Caloric Appliance Corp. Mrs. Sarkisian's recipe was judged best by BU home economists of more than 5,000 entries in the eight-week contest, which featured recipes of 16 different nations

Secretary of Interior names Ligon to council

WISTER H. LIGON, President of A. G. A., was among those recently named to the National Petroleum Council for 1960 by Secretary of the Interior Fred A. Seaton. The council, established 13 years ago, consists of active leaders in the gas and petroleum industries, with representation for each of the principal segments of industry and the geographic areas used in civil- and defense-mobilization planning.

Others appointed to the council of 108 gas

company men were F. M. Banks, Southern California Gas Co.; Eskil I. Bjork, The Peoples Gas Light and Coke Co.; Orville S. Carpenter, Texas Eastern Transmission Corp.; George R. Copeland, Algonquin Gas Transmission Co.; Paul Endacott, Phillips Petroleum Co.; Paul Kayser, El Paso Natural Gas Co.; W. W. Keeler, Phillips Petroleum Co.; N. C. McGowan, United Gas Corp.; L. T. Potter, Lone Star Gas Co.; and C. Pratt Rather, Southern Natural Gas Co.

Gaslight brightens station



Thirteen gas lights add to the new look of the old railroad station at Mesquite, Tex. With commuter trains catching on and business increasing daily, railroad officials decided to face-lift the old depot

Ebasco Services acquires H. Ferris White

IN AN EXPANSION of its Midwestern facilities, Ebasco Services, Inc. has announced its acquisition of the management consulting firm of H. Ferris White and Associates, Chicago, Ill. The Chicago office of Ebasco, established in 1949 and headed by Rolland H. Bradford, has served about 200 clients throughout the Midwest.

Under the terms of the consolidation, H.

A.G.A. lists new publications

(The catalog number, which must be included with each order, appears after each publication as "Cat. No.")

STATISTICS

- Report of Rate Committee, 1958 and 1959. \$2 to members, \$3 to nonmembers. Cat. No. 58/S.
- Monthly Bulletin of Utility Gas Sales. Free. Cat. No. 16k/S.

HOME BUREAU

- A Kitchen that is Four Rooms in One. Reprint from *House and Garden*. 9½ cents each. Cat. No. 61/K.
- A. G. A. Model Home Display Cards: Water Heating, House Heating, Cooking, Incineration, Clothes Dryer, Refrigeration, Air Conditioning. 50 cents each. Cat. Nos. in order are 62/K, 63/K, 64/K, 65/K, 66/K, 67/K, 68/K.

INDUSTRIAL AND COMMERCIAL

- How to Apply National Sanitation Foundation Standard No. 5 to Compare Gas and Electric Water Heaters by Don Williams, Information Letter No. 110. First 25 copies free, 26 or more copies 25 cents each. Cat. No. 88/I.
- Gas Turbines in Chemical Processing by L. F. Willmott, Information Letter No. 111. First 25 copies free, 26 or more copies 25 cents each. Cat. No. 89/I.

RESEARCH

- Effect of Pipe Roughness on Orifice Meter Accuracy by Howard S. Bean and J. W. Murdock. \$2. Cat. No. 33/PR.
- Interior Surface Coating of Pipe for Natural Gas Service by G. G. Wilson. \$2. Cat. No. 34/PR.

GENERAL

- 1959 Publications List Supplement. Free. Cat. No. 2b/PB.

Western companies to build 34-inch pipeline

PACIFIC LIGHTING GAS Supply Co., subsidiary of Pacific Lighting Corp., has announced letting a joint contract with Transwestern Pipeline Co. for construction of a 116-mile, 34-inch-diameter pipeline. The pipeline will supplement gas supplies for the southern California market by 300 million cubic feet a day.

The PLGS line will meet Transwestern's

1,300-mile, main-line transmission system at a point north of Needles, Calif. The contract, let to Missouri Valley Dredging Co., calls for \$360,000 to be spent on the twin 24-inch river crossings (500 feet apart) and four main-line valve assemblies (two on each side of the river). This cost will be jointly borne on a footage basis. Total cost of the project is expected to be about \$17,300,000.

Central Illinois Electric and Gas promotes Fletcher, Gordon, and Coxhead

CENTRAL ILLINOIS ELECTRIC AND GAS CO. announced three organizational promotions to take effect June 1, 1960.

Fred L. Fletcher of Rockford, Ill., vice-president and sales manager, will assume the duties of vice-president and general manager of the Lincoln, Ill., company division. Mr. Fletcher began his public utility career in 1928 as a summer employee of Sierra Pacific Power Co. in Nevada. He was graduated from the University of Nevada in 1933, with the

degree of bachelor of science in electrical engineering. He joined the company in 1941 as a distribution engineer. Since December 1, 1959, he has been president of the Rockford Chamber of Commerce.

John L. Gordon of Lincoln, Ill., vice-president and general manager of the Lincoln division, will become vice-president in charge of operations at Rockford headquarters. Mr. Gordon, a member of the board of directors of Central, joined the firm in

1926. He was a prime mover in the community effort to induce Cutler-Hammer, Inc., manufacturers of electrical equipment, to build a Lincoln plant.

Sheldon A. Coxhead of Rockford, commercial sales director, will become sales manager in Rockford. Mr. Coxhead has been with Central Illinois since 1933. He is in his second year as chairman of the industrial development committee of the Rockford Chamber of Commerce.

Personal and otherwise



S. H. Hobson

Hobson named president of Geo. D. Roper Corp.

STANLEY H. HOBSON has been elected president of the Geo. D. Roper Corp., Kankakee, Ill., by its Board of Directors on February 16. He will also continue as chairman of the board.

Mr. Hobson also announced the resignation of John P. Wright as president and director of

the corporation, and William C. Waggoner as vice-president, treasurer and director. Mr. W. G. Vuksnic was elected corporation treasurer.

Mr. Hobson formerly served 14 years as president of the Geo. D. Roper Corp. of Rockford, Illinois, before its purchase by the Florence Stove Co. of Kankakee. His experience with Roper and the gas range industry started in 1915.

The president-elect is extremely well known in gas industry circles and has served as a member of the Board of A. G. A. and has been a member of several A. G. A. Committees.

Raymond V. Hahn will head Maytag West Coast

RAYMOND V. HAHN, JR., has been named president of the Maytag West Coast Company and James W. Jensen elected treasurer in actions by the firm's board of directors. The company is a subsidiary of the Maytag Company, Newton, Iowa, manufac-

turers of gas and electric appliances for the home laundry.

Hahn succeeds his father, Raymond V. Hahn, Sr., who has announced his retirement, effective January 19, 1960. The senior Mr. Hahn has been associated with Maytag West Coast since he began selling washers house to house in 1928. He became president of the firm a year ago. The new president, a graduate of the University of California, has been vice-president and general sales manager. He joined the firm in 1946 as a regional manager and succeeded his father as southern-division sales manager in 1958, becoming vice-president a year later.

Mr. Jensen replaces Andrew F. Carty, who also is retiring. The new treasurer joined Maytag West Coast in 1958 as assistant office manager and was promoted to office manager last March. He is a graduate of the University of Illinois.

Plank becomes director

RICHARD J. PLANK was elected a director of Consolidated Natural Gas Co., it was announced in February. He also has been named president of New York State Natural Gas Corp. of Pittsburgh, a subsidiary of Consolidated.

Mr. Plank's predecessor in both positions was Fenton H. Finn, who is retiring from corporate management to become a consultant on gas production and storage.

Mr. Plank recently had been elected executive vice-president and a director of New York State Natural Gas Corp., after having served for many years as a vice-president of operations and director of The Peoples Natural Gas Co. of Pittsburgh, another Consolidated subsidiary.

An alumnus of the University of Alabama, Mr. Plank practiced engineering for several years prior to his affiliation with Consolidated.

Morgan fills new position

THE BOARD OF DIRECTORS of the New Jersey Natural Gas Co. has announced the appointment of George E. Morgan to the newly created position of vice-president in charge of operations. Mr. Morgan has been assistant manager in charge of operations of the company's central division for the past two years.

Creation of the new position was made necessary by the growth of the company, which in the past two years has added 13,000 new customers in its service area.

Glen Walsworth commended

GLEN E. WALSWORTH, manager of the Puyallup office of Washington Natural Gas Co., has received his firm's "Presidential Commendation," an annual award presented to an outstanding employee of the utility. The selection was from over 500 employees.

In the presentation Charles M. Sturkey, president, stressed the phenomenal increase in natural gas used in the Puyallup area in the past year. He commended Walsworth for the enthusiasm, training, and spirit exemplified in the accomplishment of his activities during that year. Mr. Walsworth is a graduate of Hubbard College in Olympia, Wash. He joined the company in 1953 in the accounting department of the Tacoma office and was made manager at Puyallup in May, 1956.



D. A. Crawford

Atlanta Gas Light elects Crawford and Taber

DUNCAN A. CRAWFORD, former executive vice-president of Atlanta Gas Light Co., was elected president of the company by its board of directors in Atlanta, Georgia. Mr. Crawford came to the firm in 1943 as vice-president in charge of properties outside Atlanta. Two years later he became operating

vice-president for the system and in January, 1956, was elected executive vice-president, becoming a director in August, 1956. Born in

Dedham, Massachusetts, he was graduated from Massachusetts Institute of Technology in 1926.

He succeeds Rock G. Taber, who was elevated to the newly created position of chairman of the board. Mr. Taber came to Atlanta Gas Light in 1944 as operating vice-president. In 1945 he was elected president of the company and in 1947 became a director.

In other board action, W. L. Lee, vice-president, was elected to succeed Mr. Crawford as executive vice-president, and C. R. Lawrence was re-elected vice-president; A. R. Hathaway, treasurer; J. H. Motz, secretary; and W. H. Ryan, assistant treasurer and assistant secretary.

Names in the news—a roundup of promotions and appointments

UTILITY

John R. Feehan has been named new business supervisor of the San Gabriel division sales staff of Southern Counties Gas Co. He has served as commercial sales representative on the firm's Los Angeles staff. Vincent E. Singleton has been appointed staff representative for air conditioning in the Los Angeles office of Southern Counties. John A. Mason has joined the firm as new advertising assistant to Don Robertson. He was previously with Barker Brothers Corp. where he was assistant advertising manager.

Directors of Northwest Natural Gas Co. have elected Patrick B. O'Rourke assistant vice-president. Mr. O'Rourke, who joined the firm in 1947, will continue as its general operating manager.

Michigan Consolidated Gas Co. has announced five personnel changes. In the home service department, Freida Barth, director of home service since 1947, was named executive advisor; Peggy Lewis, who is completing 10 years with the company, was appointed director; Irene Hickey, former director, executive advisor, and original organizer of the department, is retiring. In other announcements the company named Joseph G. Burns to succeed Roger J. Karcher as assistant general sales manager. Mr. Burns was made executive assistant to the vice-president and general sales manager in June, 1959.

James J. McMahon has joined Northern Natural Gas Co. as senior reserves engineer, in which capacity he will deal with gas reserves and availability. Mr. McMahon was associated with Shell Oil Co. for over 10 years.

Western Kentucky Gas Co. has announced the establishment of an industrial-development department and the appointment of William H. Neal Jr., to the new post of director of industrial development. An employee of the firm since 1949, he has served as district supervisor at the Harrodsburg and Campbellsville, Ky. divisions.

Ohio Fuel Gas Co. has made the following changes in personnel: Frank J. Sylvia has been named to the newly created position of engineering specialist for large-volume heating and air conditioning. He has been succeeded as industrial engineer of the company's Mansfield district by L. Kenneth Lucas. Mrs. Francis Olson has been appointed Norwalk district home service director, succeeding June Adkins. Robert N. Pierce has been promoted to general engineer of the engineering department. He was assistant senior engineer with Columbia Gas System Service Corp. Burdette M. King has been named superintendent of the compressor department. He has been assistant superintendent of the department since 1952 and succeeds Albert E. Bradbury, who is retiring. Mr. Bradbury, who has been with the company since 1927, was promoted to his last post in 1942. Thomas J. Swisher, assistant insurance engineer, has been transferred from Columbia Gas System Service Corp. and promoted to insurance engineer. He had been with the service corpora-

tion for three years. Russell V. Rush has been promoted to Steubenville district service manager. He had been a local service manager for the firm. Clarke Kiner, general engineer in the compressor department, has been named assistant superintendent of the department. He has been with the firm since 1951.

John L. Sellin has retired as assistant service superintendent at Niagara Mohawk Power Corp. Mr. Sellin, who has been with the company for 48 years, was secretary-treasurer of its 25-Year Club for 12 years and served as club president in 1958. He was awarded the McCarter Medal by A. G. A. in 1929 after saving the life of a Syracuse woman by applying artificial respiration.

Philadelphia Electric Co. has announced the appointment of Robert K. Brown as gas superintendent at the firm's Delaware division. Mr. Brown has been with the firm since 1946 as engineer in gas production, transmission, and distribution.

North Shore Gas Co. has appointed Art Nepstad, a former LP-Gas equipment dealer, to fill the newly created post of air conditioning representative. He will institute the company's first air conditioning sales program.

Merrill Ely has joined Honolulu Gas Co. as sales engineer. For the past nine years he has been associated with Northwest Natural Gas Co. as heating engineer.

Brooklyn Union Gas Co. has announced the promotion of Edwin J. Vetog to manager of its newly created data processing department. He was assistant manager of the accounting operations department and has been with the firm since 1941.

MANUFACTURERS

The Tappan Company has announced the appointment of Donald S. Braden as quality-control manager. With an engineering and business administration background, he has held both sales and engineering positions in the company.

A. C. Stentz of Lennox Industries, Inc. has been named factory manager of the heating and air conditioning factory in Columbus, Ohio. During his 15 years with the company, he has been production superintendent and assistant factory manager. In another development Lennox has appointed Donald O. Moore as assistant market manager for national accounts. He was Midwest division manager of national accounts until recently and previously served as territory manager in Minneapolis and St. Paul.

Tommy R. Brock has been promoted to sales manager of Temco, Inc. He has been with the firm since 1948, serving since 1958 as assistant sales manager. Prior to that he managed Temco's wholesale division. Kendrick Shinnick of the sales department succeeds Brock as assistant sales manager. Mr. Shinnick has been with the company since 1946.

Bohdan G. Passty has assumed the post of development engineer in charge of the heating division of Arkla Air Conditioning Corp. He was in the development engineer-

ing field with General Steel Wares in London before bringing his family to the United States in 1957.

Chrysler Airtemp division of Chrysler Corp. has announced the following appointments: Arthur L. Foster has been named advertising manager. He became advertising director in 1958 of the Progress Manufacturing Co., Philadelphia, a manufacturer of lighting fixtures and kitchen equipment, and a year later moved to Close and Patenaude, a Philadelphia sales-promotion agency. Thomas E. Ryan has become press-relations coordinator, a newly created post. He will handle work done previously by an outside public-relations agency. Sydney Anderson has been appointed branch manager of Airtemp's new West Coast air-conditioning and heating branch. He started with the firm in 1943 and served as an assistant sales manager before being named general manager of the packaged heating and cooling department in 1958.

E. W. Hubert has been appointed national sales manager of combination washer-dryers by the Norge division of Borg-Warner Corp. He has been with Norge since September, 1959, previously having served as central-division sales manager of Easy Laundry Appliance division of Murray Corp.

Thomas H. Jeffers has become director of facilities and tooling of Robertshaw-Fulton Controls Co. He was director of facilities and tooling, West Coast operations. Previously he was associated with the firm's western research center in California.

Locke Stove Co., manufacturer of gas incinerators, has appointed Mrs. Margaret Gregory to the newly created post of director of home services. She has had 11 years experience in the appliance field, working principally with manufacturers and distributors in the Detroit, Mich. area.

John Altmayer has been appointed central regional sales manager of Cleveland Heater Co. He has been sales manager of the Mustee Heater Co. for the past four years and has a total of 20 years' experience in sales and manufacturing. In another development the firm has appointed C. C. Lowry Co. as manufacturer's representatives of its line of gas and electric automatic water heaters in eastern Pennsylvania and northern Delaware.

Gordon L. Manista has been named application engineer of the heating division of Penn Controls, Inc. Formerly sales engineer for the firm in its Cleveland territory, he has relinquished all sales responsibilities to devote time to the newly created post to aid customer service.

Holly-General, division of the Siegler Corp., has established four new sales districts to handle expanded distribution of its products. A vice-president has been appointed to head each new office. Leroy D. Nutter will be in charge of the Dallas office. Earl C. Hefner will head the San Francisco office. John F. Droge will be vice president in charge of the Los Angeles district. Jackson L. Garner will be in charge of sales for San Diego County and Arizona.

Four new manufacturer's representatives

have been appointed by Cleveland's Barber Manufacturing Co. Industrial Combustion Sales will cover New York State, excepting New York City, and the northern counties of Pennsylvania. Edwin P. Cook Co. will cover Colorado, New Mexico, Arizona, Utah, Nevada, and Wyoming. Hugh J. McGlinchey Associates will cover eastern Pennsylvania, southern New Jersey, Maryland, Delaware, and Washington, D. C. The Sales Engineers will have the territory including Minnesota, North and South Dakotas, Iowa, and Nebraska.

Harry D. Ferguson has been appointed purchasing agent at Rockwell Manufacturing Company's instrument division. Previously he was a buyer with the general purchasing department in Pittsburgh.

General Controls Co. has announced the promotion of O. L. Liepin to heating and air-conditioning account executive for the firm's eastern region. He was branch manager of the Philadelphia office and served as regional sales representative before his recent promotion.

Carl Boyer, Jr. has been appointed by Minneapolis-Honeywell Regulator Co. as chief engineer of its Rubicon Instruments division in Philadelphia. He was chief evaluation engineer for the company's Brown Instruments division and was employed by the Rubicon Co. before its acquisition by Honeywell.

Mueller Climatrol, division of Worthington Corp., has announced the promotion of Robert Wenke from sales engineer in the Milwaukee district to regional manager of distributor sales.

The Maytag Co. has made these personnel announcements: Marvin Burford has been named to succeed Dwight Stanfield as field service assistant in the company's Kansas City branch. Mr. Stanfield will become commercial laundry sales assistant, a newly created position. Ralph Wenzel, a former Maytag dealer, has joined the company on special assignment to the marketing vice-president.

OTHER

The U.S. Department of State recently announced the designation of Hall M. Henry, president of New England Gas and Electric Association, as U.S. delegate to the meeting of the Working Party on Gas Problems of the United Nations Economic Commission for Europe. The main purpose of the meeting held in Geneva was the discussion of European fuel gas problems.

F. Crampton Frost has been promoted to the administrative staff of the American Standards Association to devote full time to membership development. He was formerly civil engineer in charge, and secretary

of the construction standards and materials and testing standards boards.

William R. Pringle, secretary of East Ohio Gas Co., has been named to head the company's new area development department. He joined the firm in 1933 and became assistant secretary and a member of the board of directors in 1943. He was elected secretary in 1944.

Joseph J. McDonough has been named district manager for the Norge division of Borg-Warner Corp. Promoted from the dealer development department, he has been in the appliance business for 16 years. Prior to joining the firm he was regional sales manager for the Thomas Organ Co.

Edward F. Connors has joined the National Housing Center as assistant sales manager. For the past three and one half years he has been assistant agency director for Hilton Hotels at the Hotel New Yorker in New York City. Elected to the board of trustees of the housing center was Carl T. Mitnick, a New Jersey home builder. He recently retired as head of the National Association of Home Builders, which has headquarters at the center.

Chrysler Airtemp, division of Chrysler Corp., has announced the appointment of Lawrence H. Baker as manager of branch sales. He joined the firm in 1952 and has served as Chicago sales engineer, Miami senior engineer, and senior engineer in applied machinery and systems in New York.

Ralph A. Larsen has been appointed chief design engineer of Stone and Webster Engineering Corp. He joined the firm in 1936 as a draftsman. Mr. Larsen succeeds Charles D. Lilburn, who has been named design consultant.

The appointment of Ralph A. Dora to the Industrial Gas Chromatography Group of the Scientific and Process Instruments division of Beckman Instruments, Inc. has been announced. The chemist will participate as a project engineer.

James A. Commander has joined the special accounting department of Commonwealth Services, Inc. as a consultant in the area of cost accounting. He was associated with Fairchild Engine and Airplane Corp. between 1951 and 1959, most recently as senior cost accountant.

Jack D. Sullivan has been named manager of the income-tax department of Texas Gas Transmission Corp. Before joining the company, Sullivan was comptroller for the Boring and Tunneling Company of America, Inc.

A. A. Steinle, Jr. was recently promoted to staff assistant to the vice-president in charge of operations at Heath Survey Consultants, Inc. He was promoted from district supervisor and has been with the firm since 1951.

Action Course for civic-minded A.G.A. members

THE BUSINESS DEPARTMENT of the U. S. Chamber of Commerce, which sponsors the Action Course in Practical Politics, currently lists 10 A. G. A. member utilities among 272 subscribing businesses. The course is designed to stimulate interest in and provide information about politics for public spirited organizations. Subscribing members

listed are:

Central Louisiana Electric Co., Consumers Power Co., Dayton Power and Light Co., Laclede Gas Co., Montana-Dakota Utilities Co., Montana Power Co., Ohio Fuel Gas Co., Oklahoma Natural Gas Co., Rochester Gas and Electric Corp., and Washington Natural Gas Co.



1960

APRIL

- 5-7 • A. G. A. Sales Conference on Industrial and Commercial Gas, The Shamrock-Hilton Hotel, Houston, Texas.
- 8-9 • Florida-Georgia Gas Association Convention, Biltmore Hotel, Palm Beach, Fla.
- 19-21 • Research and Utilization Conference, Hotel Carter, Cleveland, Ohio.
- 21-22 • Indiana Gas Association, French Lick-Sheraton Hotel, French Lick, Ind.
- 24-26 • Independent Petroleum Association of America, Midyear Meeting, Denver Hilton Hotel, Denver, Colo.
- 25-27 • A. G. A.-Edison Electric Institute National Conference of Electric and Gas Utility Accountants, Roosevelt and Commodore Hotels, New York City.
- 25-27 • Southern Gas Association, Annual Convention, Galveston, Texas.

MAY

- 9-12 • A. G. A. Commercial Gas School, Edgewater Beach Hotel, Chicago, Ill.
- 9-13 • Operating Section, Joint Distribution and Transmission Conference, Hotels Roosevelt and Jung, New Orleans, La.
- 12-13 • A. G. A. Eastern Gas Sales Conference, Shoreham Hotel, Washington, D. C.
- 15-17 • Wisconsin Utilities Association, Accounting Conference, Lake Lawn Lodge, Delavan, Wis.
- 16-18 • A. G. A. Mid-West Regional Gas Sales Conference, Edgewater Beach Hotel, Chicago, Ill.
- 23-24 • Operating Section, Production Conference, Hotel Roosevelt, New York City.
- 24-26 • Pennsylvania Gas Association, Annual Meeting, Pocono Manor, Pa.
- 26-27 • The Natural Gas and Petroleum Association of Canada, Annual Convention, Niagara Falls, Ontario.

JUNE

- 7-8 • A. G. A. -Pacific Coast Gas Association (Manufacturers section), Research and Utilization Conference, Miramar Hotel, Santa Monica, Calif.
- 13-15 • American Society of Heating, Refrigerating, and Air Conditioning Engineers, Annual Meeting, Vancouver, B.C., Canada.
- 22-25 • Canadian Gas Association, Annual Meeting, Manoir Richelieu Hotel, Murray Bay, Quebec, Canada.
- 27-28 • Michigan Gas Association, Grand Hotel, Mackinac Island, Mich.

Personnel service

SERVICES OFFERED

Industrial Sales Engineer—graduate engineer with eight years' experience with established natural gas utility company in commercial and industrial gas sales. Thoroughly familiar with commercial and industrial applications including process heating, boiler conversions, and gas air conditioning. Married, responsible, age 32. Complete resume upon request. 1974.

Engineering Administrator—gas engineer with 20 years experience in natural gas distribution and transmission. Familiar with measurement, regulation, instrumentation, leakage control, standard procedures, personnel training, electronic data processing. Very interested in cost reduction through automation and the elimination of unnecessary and/or duplicate procedures. Registered in California and Utah as a professional engineer. Detailed resume and references sent upon request. 1975.

Industrial Sales Engineer—background includes industrial sales engineering, residential and commercial heating, water heating, domestic appliances and general management responsibilities. Thorough knowledge of sales procedure in both large and small utility companies, natural, manufactured and LP-Gases. Detailed resume on request. 1976.

Mechanical Engineer—with broad experience in natural gas industry including operations and rates, also several years with FPC (certificates and rates), is desirous of changing position. 1977.

Gas Fuel Graduate—Southern Technical Institute, unit of Georgia Tech., two years' previous experience, desires position in engineering or management. Age 23, single, draft exempt. Prefer location in southeast. 1978.

Comptroller—had responsibility since 1944 for all accounting, treasury and corporate secretary functions including budgeting, financing, systems and procedures, taxes and special studies in a medium-size gas utility. Detailed resume on request. 1979.

Public Relations Director—experience all phases of public relations. Sound approach to community and customer relations. 1980.

Personnel Manager—practical experience in recruiting, interviewing, hiring, and training. Can relocate. 1981.

Woman Engineer—French, seeks position in gas industry. Two years experience in research and design of ventilation and of different uses of gas. New York location. Technical translations: English, French, Italian, German, Spanish. Translating work also accepted at home. 1982.

POSITIONS OPEN

Rate Engineer—prominent consulting company, New York City, has opening for graduate engineer with five years or more utility rate experience. Must be able to analyze, design and administer rate structures, and analyze costs of service and competitive rate schedules. Ability to write effective reports, and experience in dealing with governmental regulatory agencies desirable. Send confidential resume and salary requirements. 0922.

Gas Engineer or Rate Engineer—excellent opportunity to work with Vice President of medium-sized gas utilities consulting engineering firm (NYC) which is expanding steadily. Must be adaptable to learn all phases of gas utility business including distribution system and pipeline design, supervision of construction, rate making, special operating problems, economics, finance, etc. Must have from three to eight years' operating experience with gas utility, or equivalent experience

in consulting engineering. Pension and profit sharing plans. Send resume and salary requirements. 0924.

Depreciation Engineer—graduate engineer, experience in the gas or electric utility fields, ability to apply generally accepted theories and methods for determining depreciation rates and reserves, is being sought by a major engineering consulting firm. Under rules of taxation applicable to electric and gas utilities, will be responsible for: determining depreciation allowances based on estimated useful lives and salvage; developing and applying mortality curves to mass property accounts as a statistical means of identification of property; developing statistical studies to measure reasonableness of reserves for depreciation. 0925.

Gas Measurement Specialist—company has been producing equipment to measure gas since early 1900's. Mechanical Engineering degree or its equivalent necessary. Salary between \$7,200 and \$9,000 per year plus sales bonus. Basic requirements plus two to four years experience in the gas measurement field (industrial or utility) in an engineering or sales capacity concerned with industrial usage. After brief training period—field assignment as a meter field sales engineer. 0926.

Distribution Engineer—well established, rapidly expanding Pacific northwest natural gas utility has opening for graduate engineer with minimum of five to eight years experience in gas distribution work including design, construction, corrosion control, load studies and network analysis. Prefer married man under 35. Send resume of education, experience and salary requirements. 0927.

Assistant Home Service Director—position open in midwest gas utility serving metropolitan area of 250,000. Department of five home economists. An excellent opportunity if looking for permanency. Ability to plan and give demonstrations essential. 0928.

Ebasco Services augments management consultant staff by five

Ebasco Services, Inc., has announced five recent additions to its management consultant staff. They are Harold P. Richmond (A. G. A. MONTHLY, Jan., 1960), James F. Simes, Frank P. Wardwell, Warren C. Juchatz, and Christopher J. Pratt.

Mr. Simes has had more than 20 years'

experience in the utility industry. Before joining Ebasco, he was manager of the planning and development department of the New Jersey Natural Gas Co.

Mr. Wardwell joins Ebasco after serving three years as a faculty member of the University of Louisville, School of Business.

Mr. Juchatz was a senior acquisition analyst for the Utilities and Industries Management Corp.

Mr. Pratt was formerly a project sales engineer and coordinator for Dorr-Oliver, Inc., Stamford, Conn., and handled feasibility and engineering studies.

Young promoted at Pritchard



A. R. Young

A. RUSSELL YOUNG has been appointed assistant executive vice-president and general manager of J. F. Pritchard and Co., engineers and constructors serving the natural gas, petroleum, chemical, and power industries.

After graduation from the University of Kansas, he joined the Pritchard organization in 1938 as an engineer and became manager of the gas division in 1944. In 1954, he was appointed vice-president in charge of the gas division.

Mr. Young is also vice-president of the Constock-Pritchard Liquefaction Corp. This organization was formed to develop the design and construction of plants and facilities for natural gas liquefaction. Mr. Young is engaged in the development of a plant-building program that is producing a liquid methane fuel currently being shipped to England.

Wisconsin Southern Gas awards McCarter Medal

L. H. SCHUETZ, vice-president and general manager of Wisconsin Southern Gas Co., recently presented the McCarter Medal and Certificate to company employee Roy C. White, who saved the life of a fellow worker, Elmer Wisniewski, last year.

At the time of the near-fatal accident, Mr. Wisniewski and Mr. White had been changing a meter set from the inside of a house to the

outside. Mr. Wisniewski, working in a hole outside, was overcome by low-pressure natural gas that leaked through a plug and became trapped in the hole.

When Mr. White found Mr. Wisniewski he was unconscious. Instructing a neighbor to send for help, he immediately applied artificial respiration for the fifteen minutes before the rescue squad arrived with oxygen.

Western Society of Engineers honors Sedwick

HERBERT P. SEDWICK has received the 1960 Washington Award of the Western Society of Engineers at a special presentation dinner at the Furniture Club of America.

Mr. Sedwick was honored for leadership and achievement in electric and gas utilities, for true service in educational and humanitarian fields, and for developing young engineers.

Mr. Sedwick retired in 1958 as president of the Public Service Co. Division of Commonwealth Edison Co. after nearly 45 years of service. During that time he engineered the development of many innovations and

improvements in the operations of electric and gas systems.

Starting as an engineer with Public Service Co. of Northern Illinois in 1913, he became president in 1953. After its merger into the Commonwealth system, he was head of the Public Service Co. division. He was also executive vice-president of Commonwealth Edison and still serves as its director. A graduate of the University of Arkansas, he was cited in 1958 as engineer of the year by the Chicago chapter of the Illinois Society of Professional Engineers.

A.G.A. advisory council

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